California GARDEN

NOVEMBER-DECEMBER
1991
Volume 82 No. 6
ISSN 0008-1116
$1.50

HORTICULTURAL CALENDAR

Cont. - Nov. 10 **THE HUNTINGTON** "An English Arcadia" Exhibition
1151 Oxford Road, San Marino. Art work relating to the history of gardens & buildings now owned by the National Trust in Great Britain. Public lectures in conjunction with exhibition. Tues.-Fri.: 1-4:30 p.m. Sat. & Sun.: 10:30-4:30 p.m. $5 donation suggested. Call 818/405-2141.

Nov. Weekends **SAN DIEGO NATURAL HISTORY MUSEUM** Canyoneers Outdoor Program
Free guided nature walks. Information/brochure: 232-3821.

Oct. 31, Nov. 1 & 2 **THE HUNTINGTON** Fall Plant Festival
1151 Oxford Road, San Marino. Wide selection of trees, shrubs, flowers, & bulbs suitable for Southern California gardens. 1-4:30 p.m. Free. Call 818/405-2282.

Nov. 2 **CALIFORNIA MACADAMIA SOCIETY** Field Day
Pacific Tree Farms Nursery, 4301 Lynwood Drive, Chula Vista. Seminars & guest lecturers on growing the macadamia in California. 9-3 p.m. $13 advanced reservations; $15 at event. Lunch included. Call 728-8081.

Nov. 2 & 3 **QUAIL BOTANICAL GARDENS** Annual Plant Sale
230 Quail Gardens Drive, Encinitas. Drought tolerant plants, succulent wreaths, dried flower arranging materials. Seminars & demonstrations. Sat.: 10-1 p.m. members presale (memberships sold at door) & 1-4 p.m. general public; Sun.: 10-4 p.m. general public. Free. $1 parking. Information: 436-3036.

Nov. 5, 12, & 19 ***SAN DIEGO FLORAL ASSOCIATION** Flower Arranging Classes
Casa del Prado, Room 102, Balboa Park. Velma West, instructor. 9:30-3 p.m. $25 members, $30 non-members, for series of 3 classes. Class limited. Registration: 232-5762 or 298-5182.

Nov. 8 & 9 **SOUTH COAST BOTANIC GARDEN** Holiday in the Garden
26300 Crenshaw Boulevard, Palos Verdes Peninsula. Plant & food sale, gift shop. Sat. 11-2 p.m. fashion show & luncheon. Fri.: 7-11 p.m.; Sat.: 10-4 p.m. Reservations for fashion show/luncheon: 213/544-1847. Garden admission fee. Information: 213/544-6815.

Nov. 15 **SOUTHWESTERN COLLEGE** Seminar on Pests in the Landscape
900 Otay Lakes Road, Room 801, Chula Vista. "New Pest Control Methods & New Pesticides." 5:30-10 p.m. Free. Information: 421-6700, Ext. 371.

Nov. 16 & 17 **SAN DIEGUITO GARDEN CLUB** 15th Annual Standard Garden Show
Ecke Family Building, 230 Quail Gardens Drive, Encinitas. Floral design arrangements, exhibits, plant sale. Sat.: 1-5 p.m.; Sun.: 10-4 p.m. Free. $1 parking. Call 756-1708 or 942-8161.

Nov. 24 **SAN DIEGO MUSEUM OF ART** Mughal Gardens Lecture
Copley Auditorium, Museum of Art, Balboa Park. Dr. Ellen Smart, using detailed paintings in the Binney Collection, will reveal clues to the original plantings in these 16th & 17th Century gardens. Spectacular ones, such as Shalimar, could be replanted from these clues. 2:30 p.m. related musical or dance performance; 3:30 p.m. lecture. Free. Required reservations: 232-7931, Ext. 173.

Nov. 26 ***SAN DIEGO FLORAL ASSOCIATION** Thanksgiving Basket Class
Casa del Prado, Room 102, Balboa Park. Random weave basket. Kathy Walsh, instructor. 9:30-3 p.m. $10 members, $12 non-members. Class limited. Registration: 232-5762 or 298-5182.

Dec. Weekends **SAN DIEGO NATURAL HISTORY MUSEUM** Canyoneers Outdoor Program
Free guided nature walks. Information/brochure: 232-3821.

Dec. 3 **LA JOLLA GARDEN CLUB** Annual Christmas Tea & Bazaar
La Jolla Woman's Club, 715 Silverado Street, La Jolla. Program, Christmas music, baked goods & gifts for sale. 12:30-3:30 p.m. $7.50 donation goes to Community Project Fund. Call 459-1430.

Dec. 5 **THE HUNTINGTON** First Thursday Garden Talk, Tour, & Plant Sale
1151 Oxford Road, San Marino. "Behind the Scenes": rare tour of nursery & greenhouses. Learn how the staff collects & cares for the Huntington Botanical Gardens plants. 2:30 p.m. Free. Call 818/405-2282.

(Continued on page 190)

San Diego Floral Association
INCORPORATED MARCH 1910

Published by
San Diego Floral Association
for 81 Years

PUBLICATION STAFF
EDITOR
John J. Gagliardi
ASSISTANT EDITOR
Lucy Warren
EDITOR EMERITUS
Elizabeth Glover
Allethe Macdonald
ASSOCIATE EDITOR
Donald Boyer
PRODUCTION EDITORS
John J. Gagliardi
Lucy Warren
CONSULTANTS
Betty Newton
Dr. George Herring
Frances Clare
STAFF WRITERS
Penny Bunker
Mary Lou Orphey
Tineke Wilders
Mary Jordan
Lucy Warren
STAFF ARTIST
Celia Hanson
COORDINATORS
Advertising
Lynn Beyerle
Renewals
Bill Rathmann

PRINTED BY:
Neyenesch Printers, Inc.
2750 Kettner Boulevard
San Diego, CA 92101

Manuscripts are invited. Deadline is 90-days prior to publication date. All manuscripts and illustrations submitted will be handled carefully but we cannot assume responsibility for their safety. All submissions must be double spaced and accompanied by returned postage, if you expect them to be returned to you. *Hortus Third* is the authority for all botanical names used in this magazine. All opinions expressed are those of the authors and do not do not necessarily reflect the views of the editors of the *California Garden*.

Address all editorial material to:
California Garden
San Diego Floral Association
Casa del Prado Room 105, Balboa Park
San Diego, CA 92101-1619

Postmaster, Send change of address to:
California Garden,
Casa del Prado Room 105
Balboa Park, San Diego, CA

California SINCE 1909
GARDEN
LIBRARY OF CONGRESS NO. ISSN 0008-1116

San Diego Floral Association &
Garden Center
Casa del Prado, Balboa Park
San Diego, CA 92101-1619
Monday through Friday
10 a.m. to 12 and 1 to 3 p.m.
619/232-5762

VOLUME 82 NUMBER 6

NOVEMBER-DECEMBER 1991

162 Horticultural Calendar ..... Mary Jordan
164 The Plants and Colors of Christmas ..... Staff Edited
167 The Holiday Cacti ..... Staff Edited
168 Mr. Poinsettia ..... Staff Edited
170 Botanical Red for the Holidays ..... Lucy Warren
171 Dracaena Draco in San Diego ..... Carol Greentree
173 Bus Trip - Weidners' Garden ..... Helen Gagliardi
174 The Living Succulent Wreath ..... Teddy Colbert
176 What Makes Bromeliads Number One ..... Staff Edited
177 Floral Classes ..... Marie Walsh
178 Whatever the Weather ..... Jeannie Fernsworth
179 Now is the Time ..... Penny Bunker
182 Book Reviews ..... Staff Edited
185 1991 Index ..... Staff Edited
189 Affiliates ..... Nancy Cottingham

The cover illustration, "The Holidays," was contributed by Celia A. Hansen who is a graphic designer. She studied Fine Art in Nevada and Texas. Celia also has a Graphic Design degree from Platt College in San Diego, and currently does freelance design work. Celia can be reached at 619/482-2346.

Single copies of the current issue of *CALIFORNIA GARDEN* magazine can be purchased for $1.50 at the locations listed.

CALIFORNIA ARBORETUM FOUNDATION, Inc., 447-8207, 301 North Baldwin Ave., Arcadia, CA 91006.
MISSION HILLS NURSERY, 295-2808, 1525 Fort Stockton Drive, San Diego, CA 92103.
OUCHI NURSERY, 2263-6114, 5003 Imperial Ave., San Diego, CA 92113.
PACIFIC TREE FARMS, 422-2400, 4301 Lynwood Drive, Chula Vista, CA 92010.
SAN DIEGO FLORAL GARDEN CENTER, 232-5762, Casa del Prado, Room 105, Balboa Park, San Diego, CA 92101-1619.
WALTER ANDERSEN NURSERY, 224-8271, 3642 Enterprise St., San Diego, CA 92110
FLOWER SHOWS: Show chairman contact *California Garden*, 232-5762 if you want the magazine sold at your next show.

CALIFORNIA GARDEN (ISSN 0008-116), a non-profit publication, is published bi-monthly for $7.00 per year or $13.00 for two years, by San Diego Floral Association, Inc. Single copy is $1.50. For foreign delivery add $6.00. Entered as second class matter, December 8, 1910 at the San Diego Post Office under the Act of March 3, 1879. Second Class Postage paid at San Diego.

THE PLANTS AND COLORS OF CHRISTMAS

Edited by Staff

CHRISTMAS FOR AMERICANS TODAY is a mosaic of traditions from many lands and many eras. With the coming of Christianity, people all over the world dedicated the plants they knew and loved to the Holy Family. Our "traditional" Christmas includes customs from Greece, Rome, the Near East, Britain, Germany and the Norse countries.

Most of our Christmas customs originated in the forested northland of Europe. The Christmas tree, the Yule log, the carols and other customs were included in the tradition the English colonists first brought to America. Later, groups from other parts of Europe and the world brought their own lore. America added the turkey and the poinsettia.

Plants have always been an important part of Christmas, as symbols and as decorations. They were plants that people knew well; some had traditions of healing powers, others were noted for their supernatural virtues, and many were in daily use as fuel, tools, food or building material.

Plants of Christmas were not a suggestion of the Bible itself. In the accounts of the birth of Christ, there is no mention of any plant, with the exception of frankincense and myrrh - precious fragrant resins from Asiatic trees.

The Glastonbury thorn (*Crataegus monogyna)*, is a common English hawthorn, but legend says that this particular tree grew from a staff Joseph of Arimathea thrust into the soil when he arrive to Christianize England. It thrived and came to bloom at Christmas, and trees from its cuttings were believed to heal all who touched them on Christmas day.

In Elizabethan times a Puritan who tried to destroy the parent tree was blinded by its thorns as it fell. Glastonbury thorns continued to bloom at Christmas until 1752. England adopted the Gregorian calendar. This change shifted the date of Christmas by eleven days. When the famous thorn failed to bloom on the new Christmas date, there was a brief rebellion against the new calendar.

Legends say that **Sainfoin (*Onobrychis viciifolia)*** was much of the hay in the manger on the night of the nativity and came to bloom in celebration. One legend says that it formed a wreath around the head of the Babe. The common name, sainfoin, means wholesome hay, not holy hay. Also in the stable's legendary hay was lady's bedstraw, a member of a family of weeds common in America and often called cleavers. In Europe it was used to stuff mattresses - it was supposed to repel fleas.

The Norway spruce (*Picea abies)* was usually called a fir in the legends because "fir" is the layman's term for all evergreens, and few of those who translated these tales knew anything of botany. In most cases the tree was the Norway spruce, the king of the conifer forests. In England it was symbolic of life enduring. In Germany it was decorated lights, flowers and colored eggs. One legend says the "fir" was the original Tree of Life in Eden and had big leaves and blossoms until Eve ate of its fruit. As punishment, its leaves were shrunken to needles, its fruit to cones. Another story says it bloomed again the night of the nativity and became the first Christmas tree.

The oak (*Quercus robur)* is perhaps the most widely respected and revered of all trees. Jews, Greeks and Romans considered it sacred, and the Celts dedicated it to their gods. Oaks were preeminent in northern Europe, symbols of strength and immortality. They even imparted special value to plants that grew on them, such as mistletoe. The Yule logs kindled on Christmas Eve were always oak.

European mistletoe (*Viscum album)* legends reach back to Norse mythology. Mistletoe was the Druids' golden herb. It symbolized purity and strength and was hung in houses to bring happiness, promote romance and enforce peace. If enemies met beneath the mistletoe they disarmed and kept a truce that day. The Church banned it from Christmas ceremonies because of its pagan associations, but its magic was thought to be so strong that people used it in secret. Monks even wore it as a hidden amulet. European mistletoe grows on oaks. American mistletoe, of the same family but a different species, grows on maples and black gum trees.

English holly (*Ilex aquifolium)* was known and revered by early British Druids and Roman pagans. The Druids thought it a special favorite of the sun because it was evergreen. The Romans thought it capable of warding off lightning and evil spirits and believed its blossoms could repel poison. They sent sprigs of holly to their friends during Saturnalia, the winter festival of the god Saturn. The early Christian Church forbade the use of holly, but the Romans largely ignored the ban. The British began the custom of hanging sprigs of holly about the house as places of hiding for Christmas elves and fairies. In Germany a more serious legend evolved about the holly, which was called christdorn, or Christ's

crown of thorns. The berries were believed to be white until they were stained by Christ's blood.

Ivy (*Hedera helix)* was held to be a woman's plant, as holly was considered a man's plant. To the Greeks, ivy was an emblem of happiness and honor. Its black berries were thought to be a remedy for the plague. Throughout Europe ivy was used as a decoration for churches and homes at Christmas, but only for outer passages and on doorways because of its pagan associations. It was put up on Christmas Eve and taken down on the second day of February, Candlemas Eve. Poles twined with ivy and holly; the woman's plant and the man's were set up for Christmas sports and games.

The laurel (*Laurus nobilis)* of the legends is the European species, not America's laurel-magnolia, also called sweet bay, or our flowering mountain laurel. The laurel was chewed by the priestesses of Delphi to inspire visions and prophecies, and its leaves were burned for incense. Poets and heroes were crowned with laurels - we still speak of "winning the laurels." Doctors were crowned with laurel in the berry stage when they finished their studies. From this, **bacca** plus **laureus** came "baccalaureate" and "bachelor."

In later times, after the advent of Christianity, laurel was used to decorate churches and houses at Christmas, and in some places in Greece is still spread on church floors on Holy Saturday. It is also used to ward off thunderstorms, witches and devils. We use the leaves, bay leaves, in cooking.

Rosemary (*Rosmarinus officinalis*). The fables say that, on the flight into Egypt, Mary was sheltered by a rosemary bush, and hence rosemary blooms on the day of Christ's Passion. It was long used to decorate homes and churches at Christmas. It was a symbol of remembrance, and was carried by mourners and planted near graves. It was also a token of happiness, often used in bridal bouquets. The Romans wove rosemary into garlands for their guests and statues of their gods. Over the centuries, it has been a kind of all-purpose herb, elixir, tonic and purifier of dreams, and has even served as incense in humble country churches.

Various plants have been called **Christmas rose *(Helleborus niger)***, but perhaps best known is this black hellebore. The Christmas rose is not a rose at all but is related to the buttercup. It has been used as a medicine and a poison for thousands of years. From Egypt it was taken to early Greece and used to treat epilepsy, gout and mental disorders. it was strewn about the house to dispel evil spirits.

One legend has it that a little shepherd girl wept because she had no gift for the Babe on the night of his birth. An angel took pity and, with a lily for a wand, commanded the *Helleborus niger* to blossom. It did, for the first time ever, and the little girl gathered an armful and took them to the stable at Bethlehem. She was elated when the Babe turned from the gifts of the Magi and reached for the flowers.

The **poinsettia** *(Euphorbia pulcherrima)*, native to the New World, is one of the very few strictly American plants that have been absorbed into the body of Christmas stories. It has become a traditional Christmas plant chiefly because of its bright red color. There is a Mexican folk tale about the poinsettia that is closely related to the legend about the Christmas rose. In this version, a little child of a poor peasant family was on her way to church on Christmas Eve and was sad at not having a gift to place at the altar that she wept. An angel heard her weeping and told her to gather an armload of twigs from the roadside. She did, and when she reached the church they were in full bloom, an armload of poinsettias, a beautiful gift to place at the altar.

* * *

SOURCES: Plants of Christmas, Hal Borland, Thomas Y. Crowell, New York, 1969. The Legend of the Christmas Rose, Ellin Greene, Holiday House, 1989. A Family Christmas, Reader's Digest Association, Pleasantville, New York, 1984.

Antonelli Brothers
TUBEROUS BEGONIAS
2545 Capitola Road
Santa Cruz, California 95062
36-page Color Catalog $1.00

YOU ARE INVITED TO SUBSCRIBE TO....
California GARDEN
MAGAZINE Since 1909
The perfect gift to a friend, relative or neighbor!
1 YEAR SUBSCRIPTION $ 7.00
2 YEAR SUBSCRIPTION $13.00
(Add $6.00 per year for postage to foreign destinations)
OR BECOME A MEMBER OF....
SAN DIEGO FLORAL ASSOCIATION
MEMBERSHIP.....$10.00
Magazine included
(Please PRINT)
Name _____
Address _____
City _____ State ____ Zip _____
Phone _____
SAN DIEGO FLORAL ASSOCIATION
Casa del Prado, Balboa Park, San Diego, CA 92101-1619

Floriade

1992

TOUR DEPARTS SAN DIEGO MAY 14th,1992
VISITING HOLLAND, BELGIUM AND FRANCE!

Don't miss your once in a decade chance to see the greatest flower show on earth!

Once every ten years people from the Dutch horticulture industry join to present a world showcase called FLORIADE. This display of bulbs, flowers, plants and trees will be combined with interesting and educational exhibitions on the use of high-tech, energy and the environment. Throughout the months of April and May there will be special floral exhibits featuring such flowers as tulips, daffodils, orchids and chrysanthemums.

For anyone with an interest in horticulture and gardening, either as an amateur or professional, FLORIADE 1992 will be a unique opportunity to see the latest developments.

Very seldom have so many different aspects of the Dutch horticultural world been concentrated in one place at one time.

The exhibition will open on April 15th and close on October 11th. It promises to be one of the most popular international tourist attractions of Northern Europe in 1992.

FLEETRIDGE TRAVEL SERVICE

3725 Talbot Street
San Diego, California 92106
Telephone: (619) 222-0383
Fax: (619) 222-6211

THE HOLIDAY CACTI

Edited by Staff

THE ONE CALLED CHRISTMAS CACTUS is probably the most popular of all cacti grown in containers. It is a long-lived plant that can be enjoyed for decades, growing larger year by year. A few years back a specimen in a 14-inch clay pot was described in a popular magazine as being "4 feet wide and a yard long," and a member of our epiphyllum society has had one since 1927 that is about the same size.

The plant is attractive in its own way, is fairly easy to grow, takes little care, and around Christmas time it sends out its own ornaments - flowers of bright purplish pink.

While the Christmas cactus usually blooms during the Christmas holidays, it may bloom as late as Valentine's Day. This cactus derives from *Schlumbergera russelliana*, after the Russell family, who assembled at Woburn Abbey, England, one of the finest cactus collections of their time. This cactus was found by one of the Duke's collectors, G. Gardner, while on an expedition to Brazil in 1839. Its natural habitat is in the Organ Mountains. The plant we all grow is a hybrid of this species and *S. truncata*.

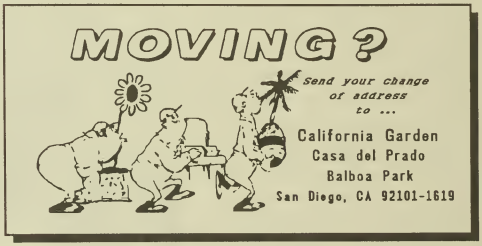
In recent years, a similar plant known in this country as Thanksgiving cactus has increased in popularity due to the fact that it blooms at that holiday. This plant is easily distinguished from the Christmas cactus since its stems have pointed lobes while the Christmas cactus stems have rounded lobes. These sharp lobes have given Thanksgiving cactus the alternate names of crab claw cactus or even lobster cactus.

The Thanksgiving cactus derives from *Schumbergera truncata* (formerly Zygocactus). The genus name honors the Frenchman Frederick Schlumberger, who, in the 1950's, owned a large cactus collection at the Chateau-des-Anthieux in Normandy.

The third holiday to be graced by a closely related group of plants is Easter. The Easter cactus blooms are symmetrical, unlike the flowers of the other holiday cacti, but their stems are similar; they resemble those of Christmas cactus in having rounded lobes, but are much flatter and have tiny hairs that look like aerial roots on the tips.

* * *

Excerpted from an article by Rick Latimer in *California Garden*, November-December 1981



Don't wait until it's too late!

DRIP IRRIGATION

by: ***"The Garden Doctor"***

"THE GARDEN DOCTOR": Considered to be one of the foremost experts on Micro Irrigation in Southern California!

Custom built, state of the art landscape and garden systems for the homeowner.

Horticultural Consultant
Ornamental Color Garden Design
Horticultural Inspections
Micro Irrigation

SERVING EAST COUNTY
(619)
441-1468

"The Garden Doctor"
Master of Urban Horticulture
3755 Avocado Blvd., Suite 248
La Mesa, CA 91941

It is the intention of THE GARDEN DOCTOR to provide homeowners with the finest horticultural services at the most affordable prices available anywhere in the County. We take great pride in our work and in our reputation of uncompromising quality and attention to detail. Only the finest quality, state-of-the-art materials and equipment are used.

"Put a little color in your life!"

MR. POINSETTIA

PAUL ECKE SR., is credited with pioneering commercial poinsettia production. By devoting his life to selecting, breeding, distributing and publicizing the poinsettia, he took the relatively unknown, obscure plant and created a global yuletide tradition.

Born in 1895 in Magdeburg, Germany, the second son of Albert and Henrietta Ecke, Paul came to the United States with his parents, brother and two sisters in 1902. The family settled in the greater Los Angeles area to engage in flower, vegetable and dairy farming. As a young boy, Paul showed remarkable strength of character and commitment to hard work. Before and after school, he milked the cows, tended the chickens and delivered milk and newspapers on his bicycle. All the money he earned went to help support the family farm.

When his father died in 1919, Paul assumed total responsibility for the family business. Following a profitable Southern California tradition, the Eckes had been raising poinsettias for years, but the early varieties grown at that time had a tendency to lose their foliage and bracts prematurely. Paul decided to focus his efforts on breeding longer-lasting poinsettias that could be successfully grown as indoor potted plants. As he developed promising new varieties, he hastened to introduce them to greenhouse growers across the country.

PAUL ECKE, SR.
Courtesy Ecke Poinsettia

In Hollywood during the 20's, Paul established stands along Sunset Boulevard and sold the fresh cut poinsettia flowers straight from the open fields. Huge bunches of colorful poinsettias greeted the delighted eyes of hundreds who stopped to buy. An early Hollywood landmark, Paul Ecke's vast fields of blazing red poinsettias attracted dozens of tourist buses during the busy holiday season. In 1923, Paul co-founded the American Florists Exchange in Los Angeles, one of the most successful grower-owned and operated wholesale flower markets in the world.

It was in Hollywood that Paul met his beloved wife-to-be, Magdalena, a native of Switzerland, who worked side by side with him in the flower fields. They married in 1924. That same year, Paul relocated the poinsettia business to San Diego County, to escape the rapid urbanization and subdivision of Hollywood.

Paul exhibited his gift for tremendous foresight and intuitive wisdom when he purchased 40 acres of dry land in Encinitas, becoming the first flower grower to locate in this area. The water came to the land two years later, as he knew it would, and the poinsettia fields were planted.

In the early 20's, Paul made his first coast-to-coast trip to call on potential poinsettia growers. For many years after, he crossed the country annually, first by train and later by automobile, visiting growers and sharing his vision for the future: a new, living symbol of Christmas - the poinsettia.

The primary activity at the Encinitas Ranch was producing field grown poinsettia mother plants. These were harvested in the spring and shipped to railroad box cars to greenhouse growers located principally east of the Mississippi River. The growers used the mother plants as a source of cuttings for their Christmas flowering plant crops.

The business took a new direction in 1963. Field production was reduced and greenhouses were built. The main effort became producing small vegetative cuttings in the controlled greenhouse environment. These cuttings are shipped by air freight to poinsettia growers all over North America as well as to most of Europe, Latin America, Australia, Africa and the Orient. Today the Ecke Ranch provides over 90% of the world's poinsettia stock plants.

Over the years, Paul remained actively committed to the growth and advancement of the poinsettia industry. He traveled extensively throughout his lifetime to share new ideas and technical information to growers all over the world. His personal contributions to local, county, state and national farm and floral organizations and universities have been instrumental in fostering quality-conscious, research-oriented, professional brand of horticulture. His professional achievements have been recognized by his fellow plantsmen with countless awards. In 1970, Paul received the industry's highest honor when he was inducted into the Society of American Florists' Floriculture Hall of Fame. In 1989 Paul Ecke Ranch Press published PROFILES IN FLOWERS describing the floriculture history of San Diego (see Book Reviews).

Aside from his professional achievements, Paul's philanthropy ran deep with several decades of quiet giving to the community. When Encinitas was a rapidly growing and largely neglected chunk of county-governed territory, Paul Ecke filled the void. He provided parks, playing fields, botanical gardens and facilities that might otherwise not have been established. The Ecke family's extraordinary gifts have included 21 acres in Encinitas donated to the North Coast Family YMCA (renamed the Magdalena Ecke Family YMCA in 1988); 35 acres in Encinitas for what is now the Magdalena Ecke gardens, a botanic garden administered by Quail Gardens Foundation; and 36 acres of beach-front property in Carlsbad to the State's Department of Parks and Recreation. Beyond the donation of valuable land, Paul gave freely to numerous altruistic projects ranging from 4-H Clubs to Tijuana orphanages; placing a high value on the education of children.

Paul Ecke donated a substantial sum of money over the years to the Encinitas Union School District. His involvement and leadership opened others' purse strings in the multiplier effect of giving. Throughout his long life, Paul set an example by doing all he could to make the world a better place to be.

He has been called a legend in his own time, but his family, friends and associates knew him as a quiet man with simple tastes and pleasures. He will be fondly remembered as an elf-like man with a mischievious grin who carried a large wicker basket full of home-grown fruits to share with his employees, a man who in his 90th year, could still be found roaming around the greenhouses, poking his index finger in the pots of his prized poinsettia plants to check if they needed water. Mr. Ecke passed away on June 21, 1991 of natural causes. He was 96 years old.

POINSETTIA
Euphorbia pulcherrina

* * *

SOURCES: Paul Ecke Poinsettias, *California Garden* magazine, *Encinitas* magazine, Nov. 1990.

DAYLILIES OF TOMORROW

featuring our own new hybrids

Visit one of the finest Daylily collections in Southern California

CREATE YOUR OWN TROPICAL LOOKING GARDEN

Easy care, full range of color. Blooms May thru December (can also be grown in containers)

DON & MARY HARDGROVE
1656 N Second St. (between Greenfield & Pepper Dr.) El Cajon • 447-4922
Open Tuesday - Sunday 10 am - 5 pm

Tiny Petals Nursery

FREE CATALOGUE—44 COLOR PICTURES
Includes 1990 roses: *IRRESISTIBLE, LITTLE CAROL, RUTH STALEY*, and more than 100 other great varieties.
SHIPPED UPS IN 4" POTS
Discounts on orders of ten or more.
TINY PETALS MINIATURE ROSE NURSERY
489 Minot Ave.
Chula Vista, CA 91910
Tel: 1-619-422-0385

ENTER A WORLD OF OUTDOOR ENJOYMENT

CLASSIC GARDENS
Landscape Design & Construction

We are offering a complete service in landscape design and installation.

(619) 459-0316
License no. 471422

John Goodpasture Horticulturist

LANDSCAPE CARE
MAINTENANCE • TREE SERVICE
LAWN RENOVATION • SOD & SEED
PLANTING • SPRINKLER SYSTEMS

Call John: (619) 542-0469

"No Job Too Large Or Too Small"

BOTANICAL RED FOR THE HOLIDAYS

Lucy Warren

CONTEMPLATING THE DEEP FOREST green and pure bright red traditionally used in holiday decorations inspires thoughts on all of the different reds with which nature so abundantly supplies our Southland over the winter months. Only in the mountains and with a few trees like the *Liquidamber* do we achieve "autumn color" so prized in the Northeast. Yet our locally grown poinsettias are treasured throughout the country. We can make everlasting wreaths from succulent plants which redden with bright southern exposure. The berries of the local toyon or Christmas berry (*Heteromeles)*, the imported *Pyracantha* from China and pepper tree (*Schinus Molle*) from Peru add color to our garlands. Our temperate climate promotes *Bromeliads*, several of which make a fine show of red as they get ready to bloom. Even the *Dracena draco* or dragon tree has bright orange berries and red sap once commonly known as dragon's blood. Chlorophyll (Greek: *chloros*, green, and *phyll*, leaf) provides the green pigment in leaves in the presence of light. Two other pigments are always present in leaves, a yellow pigment (xanthophyll) and an orange pigment (carotene). In normal leaves the approximate composition is 66% green (chlorophyll), 23% yellow (xanthophyll) and 10% orange (carotene). Various stresses such as low temperature, drought, reduced light, injuries, and diseases will affect the level of the chlorophyll and modify leaf color. Seasonal changes in late summer and autumn magnify these stresses in more northern climates.

But what about red? Interestingly, the water-soluble red pigment (anthocyan) is formed in the cell sap, not in the chromoplasts where the other pigments are found. The presence of anthocyan in the cell sap makes the whole cell red, and any or all of the cells may develop the pigment. Exposure to direct sunshine promotes a plant's natural tendency to blush, be it in leaf, fruit or flower.

ENGLISH HOLLY
Ilex aquifolium

LAUREL
Laurus nobilis

Different plants vary in their natural shades of red, from the very orange and scarlet red to the blue red and magenta, as they span the spectrum. There are three common anthocyanidins - pelargonidin (red), cyanidin (violet), and delphinidin (blue). In a few plant families red pigment comes form even more complex compounds known as betacyanins. These include plants related to the goosefood, cactus and portulaca families. The red of beets and bougainvillea are due to betacyanins.

A contemporary of Darwin, Alfred Wallace, theorized that colors may have first appeared in the parts of the plant that became adapted to a particular method of pollination. Red flowers are pollinated by birds and insects sensitive to the longer light wavelengths. Red berries and fruits attract birds and animals for their consumption to scatter the seeds. And mankind enjoys the beauty of it all.

* * *

LUCY WARREN is assistant editor and writer for *California Garden.*

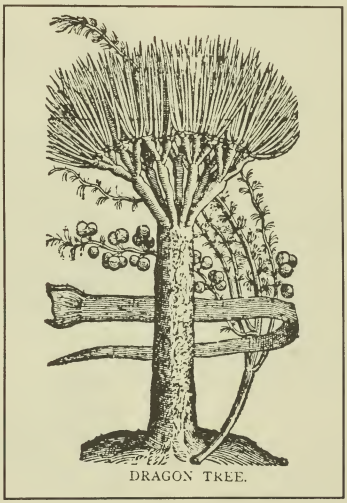
* * *

SOURCES: Fuller, Harry J. et al, THE PLANT WORLD, 5th Ed., Holt, Reinhart and Winston, Inc., NY
Proctor, Michael, THE POLLINATION OF FLOWERS, Taplinger Publishing Company, NY
Raven, Peter, et. al., THE BIOLOGY OF PLANTS.
Transeau, Edgar Nelson, Ph.D, SCIENCE OF PLANT LIFE, World Book Company, NY
Varley, Helen, Editor, COLOR, The Knapp Press, Los Angeles

DRACAENA DRACO IN SAN DIEGO

Carol Greentree

IN THE 1890's A CLUSTER of unpretentious La Jolla cottages became summertime getaway retreats for visitors from hot inland climates. Whimsically called the Green Dragon Colony, after a story by a local novelist, these simple seaview cottages attracted artists, writers and musicians. Recently the old cottages - now flimsy relics of a vanished era - ended their days at the hands of a demolition crew. Local preservationists lamented the loss of the Green Dragon Colony . . . yet in a horticultural twist of fate, enduring colonies of other green dragons are still thriving in San Diego. These scattered colonies are the groups of dragon trees (*Dracaena draco*) preserved at Quail Botanical Gardens, Balboa Park and many other sites in our county.



DRAGON TREE.

It is perfectly natural that these trees thrive here: the geography and climate of their native Canary Islands are very much like our own. The seven major islands of the Canaries group are scattered from 65-300 miles off the coast of the Sahara Desert. They lie at about the same latitudes as Guadalupe and Cedros Islands, just off the western coast of Mexico. The dragon tree is also native to Madeira, north of the Canaries.

The benign weather of the Canaries has turned the sunny archipelago into one of Europe's most popular vacation playgrounds. At sea level, temperatures remain remarkably even, day and night, year 'round. The terrain is as diverse as that of California, with snow-clad mountains, arid deserts, well-watered valleys and breeze-swept beaches. As in San Diego county, the vegetation varies with the geography; it includes the Canary Island pines and palms so familiar to every Southern California gardener. These trees are comparable to our local endemics, the Torrey pines and *Washingtonia* palms.

The Canaries are provinces of Spain, and were the last fragments of land that Columbus saw five weeks before he sighted the New World. At that time, the oldest and largest dragon tree in the islands was considered the most ancient plant alive. However, twentieth-century naturalists have assigned the earth's oldest-plant niche to the bristlecone pine, while acknowledging that the now-dead methuselah of the Canaries was probably "the longest-documented single living plant; four hundred and sixty-seven years" known to Europeans.

An Italian horticulturist who played an important role in introducing unusual plants into California, Francesco Francheschi (Fenzi), observed dragon trees in their native habitat and also recorded their presence in Santa Barbara in 1895. During the Victorian-era flurry of interest in novel and exotic plants, spiky-leaved specimens were much prized, so it is no surprise that dragon trees became showpieces in some of Southern California's finest old gardens. By the turn of the century, dragon trees had become associated with posh estates and prestigious neighborhoods such as those in Pasadena, Santa Barbara and Coronado. In fact, there are probably more venerable specimens of *D. draco* in Southern California than in all of the Canary Islands, where these plants are now endangered and uncommon in nature.

The dragon tree is a vestige of a genus that was once endemic to a much broader territory. Like the *Ginkgo* and dawn redwood, the dragon tree has been revered and protected as a sacred plant. Even today, the oldest, biggest existing dragon tree in the Canary Islands has earned its own nickname, "Drago Milenario," or Thousand-year Drago, and has become a museum-piece among the world's living things. Yet besides being a curiosity of the plant kingdom, *D. draco* has earned the respect of naturalists and horticulturists for its ability to survive the punishing conditions of desert islands and public parks. In the past, the dragon tree has been considered a garden oddity, but in the sophistication of today's environmental awareness, this plant is much more than a mere novelty. It is a species for connoisseurs of drought-adapted breeds; a long-lived emblem of the world's endangered inhabitants; a durable survivor.

In San Diego, a stout, multi-branched dragon tree calls attention to the entrance of one of America's vintage resorts: the century-old Hotel del Coronado. This is probably the most visited local specimen, but in an Autumn, 1958 *California Garden* article, Chauncy Jerabek, freshly retired Balboa Park nurseryman, stated that he had counted over 100 dragon trees in this city.

He cited more than 30 addresses for these specimens, noting several colonies of six or more plants. In a mid-1965 series of *California Garden* articles, several writers tell an intriguing true tale of an abandoned dragon tree which was rescued by a community action group, "Trees Unlimited," to become the celebrated focal point of a new Mission Hills service station.

Today, Quail Botanical Gardens, Point Loma Nazarene College (Theosophical Society), the San Diego Zoo and the Desert Garden of Balboa Park each has its own green dragon colony. *Dracaena draco* has played a very visible role in the horticulture history of San Diego, and this year Quail Botanical Gardens will continue the tradition by featuring this easy-to-grow plant at its fall sale. Docents have produced a generous supply of young plants for the November 2-3, 1991 sale, and *California Garden* readers are invited to be among the earliest shoppers for baby dragon trees. Sale hours are 1-4 pm, Saturday, and 10 am-4 pm, Sunday. Quail Foundation members may attend the pre-sale on Saturday morning, from 10 am until the public sale starts. This privilege is among many good reasons to join the Quail Foundation before the sale!

Dracaena draco is supremely well suited to the climate and soil of San Diego. Two other members of its century plant family are native to this county, and in cultivation the dragon tree can be grown like agaves or aloes. *D. draco* requires well-drained soil, but needs only minimum nutrients for its slow growth. This is an unthirsty plant which can be grown in containers - as has been done in Balboa Park for many years: you can see a dragon tree in an urn on the small plaza overlooking Zorro Garden, between Casa de Balboa and the Reuben H. Fleet Space Center.

This is a full-sun plant; warmth fosters speedier growth. Mature plants can tolerate chill and survive a rare freeze, but generally require a mild maritime temperature range between 40°-80°F. The dragon tree seems to be free of pests, having perhaps outlived all its early predators.

Dragon trees are considered to have three life-periods: juvenile, mature and senescent. Roland Hoyt's writings suggest that when very small, the chubby rosettes of succulent leaves are perfect for patio pots. A juvenile plant, when ready for the landscape, needs plenty of space around it, because after it branches, the maturing head can become half again as wide as the tree is tall. In California, mature growth seems to be reached at about 20 feet. A juvenile plant needs to be placed far enough away from buildings to allow for uniform spread and to stage a setting for the sculptural drama of its full form. Realistic decisions for the placement of a dragon tree are important, because even young plants become quite heavy and are difficult to move. A Huntington Gardens horticulturist recommends planting the tree very straight, since a picturesquely leaning tree can tip over when soils are water-logged by rain. Re-alignment is possible - but can require special equipment, strong backs and saintly dispositions.

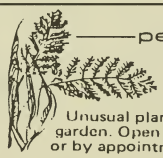
The dragon tree is a plant whose time has come in San Diego, because of the current interest in drought-tolerant plants and because of popular concern for perpetuating threatened plants of the plant. One of the chief goals at Quail Botanical Gardens is to conserve rare and endangered species suitable for gardens of this area, in keeping with the principles of the World Conservation Strategy. Another goal is to educate the public about plants and their importance in our environment.

* * *

CAROL GREENTREE is a garden writer and photographer with an avid interest in California native plants, and is a very active volunteer in the Quail Botanical Garden.

CORRECTION

In the September-October issue of *California Garden*, page 139, Edible Pod Peas In Southern California, by Joyce Gemmell, paragraph...VARIETIES...sentence should read: The flat Chinese or snow peas we know from Chinese cooking must be picked when the pea is immature. The staff apoplogizes for this error.


perennial adventure
Unusual plants for the garden. Open Saturdays or by appointment.
Christine S. Wotruba
10548 Anaheim Drive
La Mesa, CA 91941
(619)660-9631

Quail Botanical Gardens
Annual Plant Sale

Nov 2, Sat: 10am - 1pm, Members Pre-Sale
Nov 2, Sat: 1pm - 4pm, General Public
Nov 3, Sun: 10am - 4pm, General Public

Drought Tolerant Plants, Horticultural Books, Succulent Wreaths, Dried Plant Material, Gourmet Jams & Jellies, Gems & Minerals. Demonstrations, Exhibits, and Seminars. Free Admission & Parking.

Quail Botanical Gardens
230 Quail Gardens Drive
Encinitas, CA 92024
(619) 436-3036

BUS TRIP - LIVING CHRISTMAS COLOR

December 16th

Helen Gagliardi

WHERE CAN YOU FIND A GARDEN in mid-December riotous with color and filled with a variety of blooming flowers? Picture 22,000 pansies in every conceivable shade, endless rows of poinsettias, thousands of cyclamen and equal amounts of lush ivy for contrast. Now suppose you are allowed to dig up those beautiful pansies and take home all you want. Where would you be? At Weidners' Garden in Leucadia, that's where!

If you still associate that name only with begonias, you are not aware of the great diversification program carried on at this prestigious complex in recent years. Weidners today is equally famous for topiary workshops, extravagant fuchsias and impatiens, spectacular bromeliads and living Christmas wreaths.

As a pre-Christmas treat we shall tour this eye-filling nursery. You can merely ooh and ah, or prepare to dig some special prize for yourself. They will supply tools and containers and even a potting bench; but you can bring your own pots rather than purchase theirs.

Gracious and talented, Evelyn Weidner, will demonstrate the technique of making a festive live ivy wreath, a unique holiday decoration. Yes, you can purchase either the materials or the finished product.

Join us on December 16 for a short drive with our usual pick-ups. We'll reach La Jolla Village Square about 11 am - where you may choose to have a leisurely lunch on your own, or catch a quick bite and do special Christmas shopping, until we leave at 12:45 pm for Weidners. Home by 5:30.

Bus Trip - Weidners' Garden - Dec. 16

☐ $18 Members (who pay dues directly to SDFA)

☐ $21 Non-members & members of affiliates

Checks payable to:

San Diego Floral Association

Mail to Casa del Prado, Room 105, Balboa Park, San Diego, CA 92101-1619.

PLEASE INCLUDE A SELF-ADDRESSED, STAMPED ENVELOPE.

Name_____ Phone_____

Address_____ ZIP_____

PICK-UPS

☐ Red Lobster Park and Ride lot, Grossmont Center, La Mesa at 10:00 a.m.

☐ Balboa Park parking lot behind Organ Pavilion at 10:30 a.m.

☐ North County residents can join us at La Jolla Village Square where we will lunch and linger until 12:45 pm.

PROFILE OF THE DRAGON TREE

Dracaena draco is an arresting plant with an unusual form, something like its distant relatives the tree aloe and the Joshua tree. In maturity, its thick, bulging trunk bears a flat-topped or slightly domed head which may spread wider than the height of the tree. Its silhouette is almost geometric . . . like a pyramid inverted on a chunky stem. Pudgy branches are crowded at their tips with dense whorls of heavy pointed leaves up to two feet long. These are a dull blued green, slightly curved, like the blade of a burnishing tool. When in flower, during late winter, stiff panicles of white blossoms burst from each rosette of leaves, very much like the *Dracaena's* more common cousin, *Cordyline*. Fruits are orange, slightly larger than cherries, and loosely clustered on protruding stems. They ripen gradually over a period of some months, and make a show of their own in April. For an ultra-tidy tree, trim off the fruiting stems; for future baby dragon trees, let them ripen to seed. Volunteers are not uncommon.

When old leaves fall off, pronounced scars remain on the fleshy stems. These grooves create an interesting pattern on the youngest portions of the bark, which has a metallic sheen that dulls with age to a grainy grey. Basket makers prize the fallen leaves for the spot of bright orange color which persists at the base. Creative Quail docents weave decorative baskets with dragon tree leaves, and will offer them at this year's sale.

Historically, the most distinctive feature of the dragon tree is the blood-red color of its sap, which has given rise to aboriginal myths and medieval medications. This resinous sap has been used to tint the varnish of old Italian violins and to dye marble a rosy color. Combined with the plant's dramatic, spiky form, this ruddy sap gave rise to *Dracaena draco's* primitive image as a dragon - hence its graphic name and special place in folklore.

THE LIVING SUCCULENT WREATH

Teddy Colbert

THE LIVING SUCCULENT WREATH is a small-space, drought compatible, low-maintenance garden art ideal for Southern California gardens yet adaptable to an extraordinary range of indoor and outdoor growing that makes ivy covered topiary, - well, green with envy.

Last May I was spending my birthday alone in the San Diego Zoo at the invitation of the Zoo and the American Ivy Society, joint sponsors of the National Topiary Conference.

Photo by Nick Springett

My method, categorized as "non-traditional topiary," was honored with approximately a dozen other national artists including the two Disneyland displays. Because my wreath technique was independently conceived and developed specifically for succulents during the last 16 years, the honor conferred by the American Ivy Society was a surprise.

In spite of a partially shaded display area and frequent irrigation by the Zoo's exemplary horticultural staff much of the newly installed ivy and other plant material used by the out-of-town artists suffered a typical Southland tourist malady of sunburn. California law had prohibited the importing of their preconditioned plant material. My newly planted succulent wreaths however, because they are composed of survivor plant material, actually looked better under stress and were unscathed after one thorough watering

The average life span of the topiary types in the exhibit, I learned, was five years in temperate climates and three years in Florida. My oldest current wreath is entering its eighth year and a patented improved frame promises additional longevity.

Basically the living succulent wreath consists of a moss-wrapped soil-filled circular frame into which callused succulent cuttings are propagated and sustained. It is based on the uncanny ability of succulents to begin life again after they have been severed from their life support.

Newly planted wreaths resemble a rich tapestry and as the plants mature they take on the appearance of a Renaissance della Robia sculptured wreath. As the growing plants exceed the parameters of the wreath form, the tip portion is pruned off leaving a leaf set to generate new growth. After the end dies, the new cut is either replanted to fill out the same wreath or used toward a new one.

Sizes vary and styles are either vertical, for wall or door wreaths, and horizontal with or without candle holders for centerpiece and suspended styles. The most popular and versatile style is a fourteen inch diameter frame with four unobtrusive built-in candle holders that are camouflaged by plants.

A wreath hanging on a garden wall or door can move to the dining table in moments to become a unique centerpiece for supper parties, birthdays, anniversaries and weddings. The wreaths have served as gifts of distinction for corporate and private events including housewarmings and grand openings.

The small four-candle-holder model can also serve as an advent wreath prior to Christmas. The larger nine holder one becomes a majestic menorah during Chanukah. Both models can be suspended and planted with cascading specimens on the side.

A rich tradition has been established at several churches in Southern California area which use living succulent wreaths in their advent liturgy. There are made by the congregation with their own garden succulents. They survive inside the church for the three weeks of advent with minor damage but the key factor afterwards is a gradual acclimation to their original location.

These wreaths grow wherever succulents thrive, indoors or outdoors. By selection of plant material, either tender or hardy, with low or high light requirements, the wreaths suit most areas of the United States.

My wreaths in West Los Angeles grow outdoors and receive a strong southwest light with about two hours of direct sun in the late afternoon. My suspended

candelabra, used in the December 1990 Sunset Magazine, grew in a northeast bay window. By rotating it regularly on an attached swivel, it developed evenly by uniform exposure to the light.

My most ambitious indoor wreath was created with thirteen species of low light dwarf *Sansievieria*. The 30 inch span was dramatic on a south facing inside bathroom wall.

A standard assortment of succulents in my commercially offered wreaths consist of half *Crassula argentea*, 'Crosby's Compact' chosen for its red tinged margins and dwarf form. The balance, used as accents, are usually ten each of such groups as echevarias, sedum hybrids, graptopetalum, kalenchoe, crassulas hybrids, sempervivum and senecio.

I consider the plants as on an artist's palette and compose the arrangement to please my eye experimenting with combinations of smooth and fuzzy textures, round and angular lines and yellow greens to set off the blue grays.

Personal taste and availability of plant material add individual character to each wreath. No two alike. All I have seen are beautiful.

For method of construction readers can refer to the Winter, 1990 edition of The Cactus and Succulent Journal of America, or in the December, 1991 issue of HOME, or send for a detailed instruction and maintenance instruction booklet as described in this article.

"When and how do I water?," is the most frequent question asked. The answer is; deeply but seldom in order to direct the roots into the core of the soil. To test for watering use the loaf-of-fresh-bread-test; grasp the back of the wreath. If the moss is dry on the outside but soft inside like fresh bread, do not water. If it is dry outside but firm, like stale bread, water the wreath deeply.

Dunking is quick. Submerge the wreath in a tub then drain on the half frame. Never mist or spray succulents since it encourages shallow roots.

The most efficient method, ideal in our drought conscious gardeners, utilizes inexpensive plastic drip irrigation bags that allow a controlled slow release of water directly into the root zone over a few hours, overnight or two weeks.

Aeration is essential for the health of the plants and I include an extra half frame that should be slipped behind or underneath, unattached, at all times.

* * *

TEDDY COLBERT designs and sells all materials for her patented succulent wreaths. For more information and prices write: Teddy Colbert's Garden, 2210 Wilshire Blvd., Box 187, Santa Monica, CA 90403 or call (213) 472-0477.

THE TESTED PRODUCTS FOR SAN DIEGO COUNTY GARDENING!

MILORGANITE - Since 1928 the only salt free organic fertilizer.

LOAMEX - The professionals choice in long lasting organic soil amendment.

FERTI-PILLS - Feeds trees and shrubs safely for 2 years.

SARVON - The enzyme, humic acid penetrant that reduces water usage. Ideal for slopes, container and all garden plantings.

ASK FOR THESE PRODUCTS AT YOUR FAVORITE NURSERY.

WHAT MAKES BROMELIADS NO. 1?

Achmea fasciata - Mardi Huntington

THE PLANTS FOR THE 90'S: Colorful Bromeliads make excellent indoor plants. They require very little care and thrive on neglect. This combination of hardiness and the long-lasting flowering period make bromeliads the very best of the indoor flowering plants.

COLORFUL BLOOMS: The blooms are extremely attractive with an exceptional range of colors. Some are waxy and exotic looking while the color in others is produced by colorful bracts (leaves). Because of the waxy nature of the bloom (they actually feel like leaves), the color of the bromeliad bloom can endure up to eight months. In addition, some have beautiful berries (Aechmeas) and beautiful flowers (Tillandsias). Although bromeliads produce beautiful blooms, the foliage is quite beautiful itself. After a bromeliad has blossomed, it will slowly die over a period of up to one year, but not before it produces three to four pups.

WATERING: Because of the shape and structure of the plant, water is trapped in the cup of the vase-like structure and then runs down in a spiral into the soil.. Because of this, they do not require frequent watering (about every ten days to 3 weeks depending upon lightintensity). It is important not to allow stagnant water to remain in the "cup" (central part of the leaves), therefore it is recommended that the cup be emptied once a month.

LIGHT: Bromeliads prefer bright, diffused light but not direct sun because the leaves will sunburn. A minimum of 200 foot candles for indoor maintenance is best in preserving the colorful appearance of the flower.

FERTILIZER: Use fertilizer only in the summer months. The strength of the fertilizer should not exceed the recommended dosage. Never use fish emulsions or other organic fertilizers. Use fertilizers which dissolve in water and only when at least 750 foot candles of light are present. "Dark" interior conditions require no fertilizer.

TEMPERATURES: House temperatures are ideal for these plants, usually between 55°F and 85°F. Because of their low-maintenance requirements, bromeliads are being used with increasing frequency in hotels, malls, banks, restaurants, etc., where minimum upkeep is required.

TRANSPLANTING: New plants, called "pups" or offshoots, will grow from the side of the mother plant near its base. They can be removed with a sharp knife or clippers when they are one-third the size of the mother plant. The pups should then be re-potted and watered similar to other bromeliads. It is important that the potting soil must drain rapidly and hold the plant firmly in the pot. Be sure your bromeliads have an adequate root system before transplanting.

* * *

Further information and brochure write Kent's Bromeliad Nursery, 703 Pomelo Drive, Vista, CA 92083.

Quesnelia quesneliana

BROMELIAD STUDY GROUP OF BALBOA PARK

Learn How to Grow Beautiful Bromeliads

MEETINGS: 7:30 PM • 2nd Tuesday of Each Month

Casa del Prado • Room 104 • Balboa Park

Visitors and New Members are Welcome

WALTER ANDERSEN NURSERY
3642 Enterprise Street
OPEN 7 DAYS A WEEK
San Diego, CA 92110
8:00 A.M. TO 5:00 P.M.
(619) 224-8271
FREE GARDEN CLASSES
9:00 A.M. — SATURDAY MORNINGS

McDANIEL'S MINIATURE ROSES

BUSH • TREE • CLIMBER • HANGING BASKET
HARDY AND EVERBLOOMING
SHIPPED ALL YEAR
7523 ZEMCO ST.
LEMON GROVE, CA 91945
Please Phone (619) 469-4669

PACIFIC TREE FARMS
CATALOG $1.50
Our trees are selections of the best performing varieties available.
Closed Tuesdays
FRUIT • NUTS • BERRIES
For Mild Climates
- STONEFRUIT TREES — Many on Zaiger semi-dwarf root stock
- APPLES — Anna, Dorsett Golden, Gordon, Granny Smith, Mutsu, Ein Shemer
- CITRUS — 65 varieties • FLORIDA BLUEBERRIES
  • KIWI FRUIT VINES — low and high chill
  • PERSIMMONS — 6 varieties
- MACADAMIA, WALNUT, ALMOND, CHESTNUT, PECAN
- MANGO, SAPOTE, BANANA, LITCHI, CHERIMOYA, PAPAYA

• DECOLLATE SNAILS •
4301 Lynnwood Dr., Chula Vista 92010
(619) 422-2400

FLORAL CLASSES

TOPIARY CLASS
IVY COVERED SWAN
Instructor: Donna Wright
October 29
$36 members, $40 non-members
Bring apron and scissors.
FLOWER ARRANGING SERIES
Instructor: Velma West
November 5, 12, 19
$25 members, $30 non-members for series
THANKSGIVING BASKET
A random weave basket
Instructor: Kathy Walsh
November 26
$10 members, $12 non-members

You won't want to miss these classes. Imagine having an ivy topiary swan to adorn your holiday table. The frame, moss and plants are all included in the price of the class! Bring your own vase and flowers and you will go home with an artistic floral display. Or come to the basket class and create a random weave decorative basket. Sign up soon because each class size is limited!

All classes are held in Room 102 of the Casa del Prado in Balboa Park. Class times are 9:30-2:30 p.m. Floral arranging classes will need to bring their own flowers, containers and supplies. Craft classes include **all materials** for a complete project but you will need to bring some basic tools. Pre-registration required for all classes as size is limited. Call Marie Walsh at 298-5182 for further information.

CLASS REGISTRATION FORM
San Diego Floral Association
Casa del Prado, Balboa Park
San Diego, CA 92101-1619

Oct. 29 Topiary Swan $_____
Nov. 5/12/19 Flower Arranging $_____
Nov. 26 Thanksgiving Basket $_____

TOTAL $_____

Name: .....

Address: .....

Phone: .....

WHATEVER THE WEATHER

Almanacs Are A Gardening Tradition

by Jeannie Fernsworth

GARDENING IS ALMOST AS OLD as civilization itself. And as with any pursuit, so vital to life itself, a great deal of tradition and lore has sprung up around it. One of the oldest and most colorful vehicles for this tradition and lore is the almanac. The oldest still-publishing almanac in the United States today is *The Old Farmer's Almanac*.

Call *The Old Farmer's Almanac* and ask for the editor, Robert B. Thomas, and with nary a pause the voice at the other end of the telephone will say, "I'm sorry, Mr Thomas died in 1846."

News of his death comes as a shock. The current generation of *Old Farmer's Almanac* readers missed the announcement of his death in the 1847 issue. What's more, every year Mr. Thomas "writes" a letter to patrons that is published in the *Almanac* which carries his name on the front cover. This common-sense-dispensing man touches thousands of lives each year-and seems so accessible.

Who is, or was, Robert B. Thomas? A home-educated man, Mr. Thomas was brought up in Colonial Boston where he pursued several trades: schoolteacher, bookbinder, bookseller and finally almanac maker. It was an interest in astronomy and a book in his father's library, *Ferguson's Astronomy*, that gave him the idea for an almanac.

In 1793, at the age of 27, Robert B. Thomas produced his first almanac. From the outset, Mr. Thomas believed that an almanac was a medium for scientific information.

So it is not surprising that in "his" most recent letter to patrons in the 1990 edition, Thomas praises the calculations of the current scientific sage on staff, Dr. Richard Head- Meteorologist *cum laude*. Almanacs have always struggled to balance their folksy image with a scientific focus.

The struggle for recognition of the science of weather forecasts has been a continual battle. Moon cycles, sunspots and climate patterns are accepted tools of long-range meteorology. Folklore has it that if the brown stripe on the back of a caterpillar is thick, the winter will be mild. A recent five-year study by the American Museum of Natural History in New York City found no correlation.

Questions to the almanac about how long-range weather forecasts are made and their accuracy are met with Thomas wit and wisdom. It's a matter of style over science. The curious are left feeling the current weather forecast is as mysterious a process as is Mr. Thomas's ability to write the patron's page issue after issue for one hundred and ninety-nine uninterrupted years.

Today it is common practice to publish scientific techniques and data in journals such as *Monthly Weather Review, Weather Forecasting* or *Nature* for other scientists to review. Dr. Wysocki, a meteorologist at Cornell University's Atmospheric Science Unit, questions the techniques used in almanac predictions. Dr. Wysocki does not dispute the relationship between moon cycles and weather; however, scientists disagree about just what the correlation is.

Almanacs are perhaps most famous for weather forecasts, but farmers and gardeners also seek out the information on planting and other gardening activities according to moon cycles. In the early 1800s, Mr. Thomas printed a letter from a reader identified as "an old Ploughjogger": "I am, Sir, an old farmer, upwards of seventy-five years of age, and this I have proved by my own experience...Apple trees as well as all other fruit trees should be set out in the new of the moon." If the heavens could be counted on to affect the weather, then the moon and stars should be consulted for planting. (As with weather forecasts, debate rages within the scientific community over folklore and the "science" of farming.)

Science versus folk wisdom notwithstanding, almanacs, once practical guides, remain living artifacts. A search of earlier almanacs, points out some striking similarities. Cato, a Roman consul and early almanac writer, wrote in a treatise on agriculture, "Finish every job promptly; for in farming, if you are late about one thing, everything will be behindhand. If straw is scarce, gather oak leaves and use them as bedding for your oxen. Have a good large compost heap. In rainy weather find something to do indoors. Don't be idle, but clean up around the building. Remember that expenses go on even if the work stops." This extraction is a translation of what was written in Latin approximately 150 B.C. In 1796, *The Old Farmer's Almanac* carried a comparable message, "Look well to your barns, and fatting herds...Live temperately and spend frugally." Have times changed so much?

Almanacs are a thread binding much of western civilization. The science of each new age has always disputed the science of an older age and labeled it folklore, legend and myth. There is a lingering nostalgia and perhaps a desire to touch base with something old, strong, wise and more or less scientific keeps almanacs alive.

* * *

Printed with permission from Brooklyn Botanic Garden's **Plants and Garden News**, Volume 5, No. 4, 1990.

California GARDEN

NOW IS THE TIME...

A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES

Compiled by Penny Bunker

AFRICAN VIOLETS

Helen LaGamma

PROVIDE adequate humidity for your plants; monitor the temperature carefully.
CONTINUE to have good circulation of air about the plants.
PREVENT extreme differences between night and day temperatures.
KEEP the violets well groomed; repot plants that have outgrown their pots. A good rule - the pot should be 1.3 times the diameter of the leaf span.
PLAN on using your plants with holiday decorations; plant in containers to match color scheme.

* * *

BEGONIAS

Margaret Lee

CLEAN up all debris, keep dead leaves and spent blooms removed.
PUT a top dressing of your favorite mulch around plants to replace any soil or mulch washed away by fall rains.
WATER only as needed - keep the plant material moist but not wet.
GIVE a light feeding several times a month - this will help the plants withstand any adverse conditions a little better.
BE VIGILANT for insects; spray for mealybugs and other pests.
SPRAY for mildew control.
ALLOW tuberous begonias to die back on their own; put aside and let rest, but sprinkle occasionally.

2600 Sarver Lane
(619) 744-0600
Sarver Nursery Co.
of California
Azaleas and Cannas our Specialty
Rosalind E. Sarver, owner
P.O. Box 905
San Marcos, CA 92079

BONSAI

Dr. Herbert Markowitz

CONSIDER grafting conifers.
PRUNE black pines by cutting the candles about half length.
DO NOT transplant any trees at this time.
KEEP deciduous trees protected from sudden changes of temperature.
MOVE your plants to a shady area if a hot spell occurs. Avoid a second growth period during this time - it will weaken the trees.
REMOVE any old leaves, fruit or seeds from deciduous trees.
WITHHOLD fertilizer.
PROTECT trees from any heavy rains if they arrive.

* * *

BROMELIADS

Mary Siemers

ALLOW plants to rest.
STOP fertilizing during the fall and winter months except for those plants kept in a greenhouse.
WITHHOLD watering during any cold damp weather.
SPACE your plants apart to allow adequate air circulation to prevent scale.
CHECK plants for snails and slugs; distribute bait around the base of the pot.
CUT leaves to keep plant clean at all times.
PROTECT plants from exposure to the elements; frost, hail and strong winds can do irreparable damage.

* * *

CACTI & SUCCULENTS

Joseph Betzler

WATCH your plants. Most cacti and succulents have a dormancy period. With strange weather pattern this year, many winter growers may start early growth.
FERTILIZE those plants that are actively growing.
WATER only in the morning on a day that is going to be warm. By doing this, no standing water will be on the plants in the evening.
PROTECT your tender plants from excessive cold and winter rains. Repair cracks and leaks before the rains arrive.
REMEMBER that plants that are too cold during the cool evenings can foster growth of fungi and bacteria.
KEEP the ants under control; they transport aphids and mealybugs.
START looking for some winter growing succulents to add as an extra dimension to your collection.
CLEAN up your plants growing area.

CAMELLIAS
E.C. Snooks

WATCH watering; camellias do not like to get dry - moist but not wet. Mist in late afternoon on any dry hot days to keep leaves from burning.
MAINTAIN a regular spraying program, especially against looper worms.
CHECK mites; the most obvious will be red spider mites, but check for bud mites as well. You can use a systemic miticide.
FEED 2-10-10 fertilizer for better and larger blooms.
KEEP plants clean; remove all fallen blooms and petals to prevent possible petal blight infestation.
CONTINUE to disbud; leave only one bud at each terminal and no more than three further down the stem.
TREAT some buds with gibberellic acid once a week for larger blooms. This is essential if you plan to enter a show in the spring.
RENEW mulch where necessary, use bark or pine needles.
PLAN any transplanting in December or later during the blooming season; this is dormant time. It is a good idea to get new plants while they are in bloom.

* * *

DAHLIAS
Abe Janzen

WITHHOLD water and fertilizer to allow plants to go dormant.
ALLOW plants to dry - when brown about 12 inches from the ground, cut off the stalk.
LEAVE tubers in the ground to harden off if there is good drainage; otherwise lift roots before the heavy rains.
WASH clumps after digging, and let dry a few hours before storing. If dividing tubers, treat cut areas with soil sulphur, and store in vermiculite, sand or other medium. Store out of the weather. Be sure tubers are tagged before storage.

* * *

EPIPHYLLUMS (Orchid Cactus)

WITHHOLD fertilizers, especially those containing nitrogen. Allow the plant to become semi-dormant.
WATER sparingly, but do not allow plant to dry out completely.
PROTECT plants from exposure to the elements. Frost, hail and strong winds can cause irreversible damage. Over-exposure to harsh winter sunlight can be as detrimental as hot summer sun.
TIE or stake long branches so they will not break when winds and rain arrive.
CHECK for snails and slugs. Use a few granules of Sluggetta at the base of container - it helps control and leaves little residue.
MAINTAIN good grooming - prune out dead, unsightly and non-productive branches to conserve plant's energy.
TRANSPLANT into a larger container plants that are not expected to bloom next spring.
TAKE advantage of the winter rains. Prolonged rains will not harm plants in good porous soil; rain tends to leach the soil of accumulated salts. You can store collected rain water in opaque containers to prevent mosquito larvae and any buildup of algae.

* * *

FERNS
Ray Sodomka

FERTILIZE with a diluted mixture once again before the December rest period.
WATER if it does not rain. Check those plants not reached by rainfall.
PROTECT plants at night in frost areas. Cover with newspaper, old sheets or place in garage.
CONTINUE to be alert for insects - slugs and snails are active.
PLANT spores and keep in a warm area.
CHECK planting mixture to see that it has not completely broken down; add more mix to containers that need it.

* * *

FUCHSIAS

CLEAN up plants; remove dead leaves and other debris from pots, baskets and around ground plants.
PRUNE if living in a frost-free area. Cuttings may be taken from good tip ends.
ALLOW plants to go dormant in areas where there is a danger of frost.
WATER and feed plants regularly; even in cool weather the plants still need some food and water.
PROTECT from any heavy rains if they arrive.
WATCH for insects in warmer areas.
PROTECT from frost and cold winds in areas where required; the garage is a good protective area.

* * *

GERANIUMS (Pelargoniums)
Carol Roller

WATER thoroughly when plants become somewhat dry. Water will be necessary less often than in the warmer seasons. Allow the excess water to drain away. Keep foliage as dry as possible.
CONTINUE feeding with a balanced fertilizer dissolved in water using less than the recommended strength.

Apply as often as needed to avoid nutritional deficiencies. Long term pellets may be used instead.
CONTINUE a pest and disease control prevention program, using products according to the manufacturers' directions.
PRUNE any plants which have not been cut back. At least one green leaf should remain on every stem of regals, scenteds and similar types. Lanky plants which were pruned earlier can be cut back again to produce more compact plants.
PINCH plants which were pruned earlier in the season.
MAKE cuttings from the prunings. Shelter cuttings from extreme weather.
GIVE plants temporary shelter from freezing if temperatures fall too low.
CONTINUE to rotate plants on a regular basis in order to keep them well-shaped.

* * *

IRIS

San Diego-Imperial Counties Iris Society

CLEAN beds of dead leaves and weeds; aphids winter over in debris filled areas.
SPRAY for insects and disease.
GIVE acid fertilizer (Camellia Food) to Japanese and Louisiana iris.
PLANT bulbous type - Dutch, English and Spanish styles.
MOVE Pacific Coast natives in late December. keep well watered until they are established.
HAVE a regular watering program for all varieties.

* * *

ORCHIDS

Charles Fouquette

FEED diluted solution of 30-10-10 fertilizer to Oncidium alliance, Brassidiums and Miltonias if they are planted in bark. Otherwise feed a diluted solution of 18-18-18 or equal type if they are planted in another media.
CLEAN up trash and leaves in the growing areas; take down the shadecloth to give plants as much light as possible. The sun has moved to the south and the days are shorter.
KEEP after snails and other pests.
LET deciduous Dendrobidiums go dormant. Stop feeding them when leaves start to fall. Water just enough to maintain moisture.
WATCH for spikes on some evergreen Dendrobidiums when terminal leaves mature.
REPOT Cattleyas that have new growth coming over the side of the pot - otherwise wait until spring.
FEED Cattleyas an even fertilizer every third watering at the same time - 1118-18-18 or similar.
FEED Cymbidiums a 10-30-20 or equal fertilizer.
STAKE new spikes when needed, but try not to rotate the plant - the flower spike might become twisted.
CLEAN swamp coolers, wet pads and window coolers. Drain oil and cover motor, check electrical cords and switches; spray motor and electrical parts with WD-40 before storing for winter.
CHECK heater fittings, pilot lights, fans and flues. Make sure you have a clear outlet fort the exhaust gasses. The burned gas will cause plant and flower loss if there is no air inlet and air and gas outlet.

* * *

ROSES

Brian Donn

STOP feeding and reduce your watering. You want to discourage new growth and allow your bushes to go dormant.
CONTINUE watering roses in pots; just enough to keep the root ball from drying out completely.
DECIDE which bushes you might discard. Dig them up and prepare the planting hole for the replacement. Dig the soil to 18 inches deep, add one-half cup of bonemeal or superphosphate and a few shovelsful of planter mix to improve drainage and aeration.
GET bare-root plants in late December or January.
DORMANT spray in December and again in January for pest and disease control.

* * *

GREEN THUMB ITEMS

CONTINUE to plant annuals and perennials.
PLANT bulbs for spring color; daffodils, Narcissus, ranunculus, anemones, scillas, Dutch iris, lilies (callas). Tulips and hyacinths may be planted after Thanksgiving. (Refrigerate several weeks before planting)
FEED bird-of-paradise. Cut leaf growth from clumps to improve appearance.
PRUNE and shape holly and pyracantha when cutting berries for holiday decorations.
APPLY dormant spray in December to control pests and diseases next year.
USE snail and slug bait regularly.

SUN HARBOR FUCHSIA SOCIETY

Member National Fuchsia Society
Meets 4th Wednesday Each Month
7:00 PM, Rm 101, Casa del Prado, Balboa Park
Plant Table • Refreshments • Friends • Speakers
VISITORS & NEW MEMBERS WELCOME!

Book Reviews

Melvin, Robert
PROFILES IN FLOWERS; The Story of San Diego County Floriculture
Paul Ecke Ranch Press, Encinitas, 1989, 168 pages, 9" x 6", paperback.

At first encounter this book seems to be of interest only in San Diego County, but in fact it well deserves a wider audience. It is a portrait of the development of floriculture in Southern California, beginning before World War II. Since the author specifically excludes labor relations in his study, the book cannot be used as a text on the private enterprise system, although it gives a fascinating picture of hard work, well-earned success and misfortune (some of it totally undeserved) in an industry which is often at the mercy of elements beyond human control.

Northern San Diego County is still environmentally hospitable to flowers, although less so than in the Thirties and Forties, when men and women of vision started the nurseries which were to prosper and grow into a vital part of their area's economy.

Most of the book consists of biographical portraits of those pioneers, and there are many photographs, so that the students of local history will find a useful resource here. Now in the Nineties, with the encroachment of various kinds of pollution and the arrival of land-hungry construction developers, the industry seems threatened with decline, so that this book has appeared at an opportune time.

Historians will be interested in the author's account of the effect of the displacement of Japanese heritage in World War II and with the influence of the development of air transportation, two disparate events which have an appropriate place in his narrative.

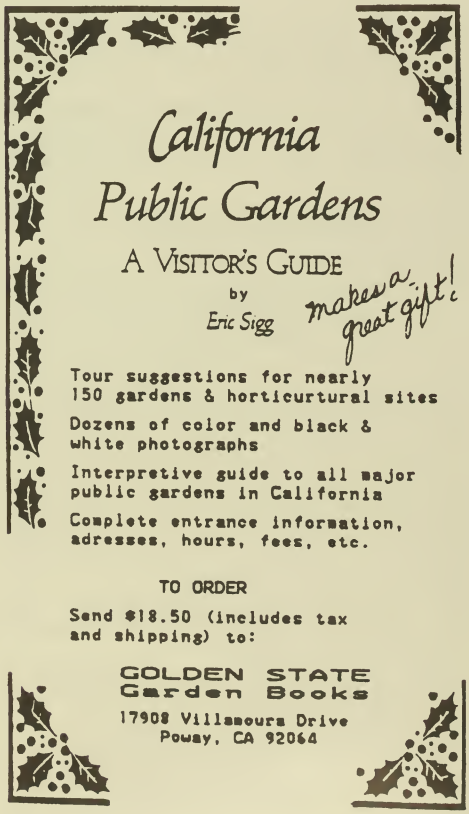
There is an excellent bibliography, and the text is very readable. The use of this book, plus a search of the relevant back issues of *California Garden*, would give any researcher a comprehensive survey of an interesting piece of California history.

Book review by Elsie Topham

Van Patten, George F.
ORGANIC GARDEN VEGETABLES
Van Patten Publishing, Portland, 1991
144 pages, illustrated, 8½" x 11", $9.95, paperback

Once upon a time organic gardening was thought to be something of a fad, but now it is, quite rightly, recognized as an important technique and a vital factor in health care. Here is a book which is one of the best currently available. It has many black and white illustrations and the text, full of useful details, is well organized and easy to handle. There is information here which is not readily found elsewhere. Those who want to know about green manure, no-till gardening and double digging need only read this book. Even those whose interest in vegetables is confined to eating them will find good ideas on cooking as well as growing these necessary foods. This would make a good gift for a health-conscious gardener.

Book review by Elsie Topham


California
Public Gardens
A Visitor's Guide
by
Eric Sigg
makes a great gift!
Tour suggestions for nearly 150 gardens & horticurtural sites
Dozens of color and black & white photographs
Interpretive guide to all major public gardens in California
Complete entrance information, adresses, hours, fees, etc.
TO ORDER
Send $18.50 (includes tax and shipping) to:
GOLDEN STATE
Garden Books
17908 Villamoura Drive
Poway, CA 92064

Swindells, Philip
AT THE WATER'S EDGE; Gardening With Water-Loving Plants
Ward Lock, London, 1991
128 pages, color photos, illustrated, 8" x 10", $14.95, paperback.

Philip Swindells has written several books on ornamental water gardening, some of which are available in the SDFA library. Because of the need to save water Southern California gardeners are unlikely to do more than wish for a water garden, but in this book the author talks to those who have access to areas which are naturally wet, such as a streamside or lake shore. He has some useful instructions on how to construct a bog garden and a peat garden, complete with diagrams, and the whole text is embellished with beautiful color photographs. There is good advice on what plants to grow and information on propagation and plant problems. Readers in arid regions would find this a good book for armchair gardening.

Book review by Elsie Topham

* * *

WISLEY HANDBOOKS produced by the Royal Horticultural Society. Cassell, London; Sterling Publishing Co., New York, 53 titles, 64 pages each book, color illustrations, 5½" x 8½", $5.95, paperback.

The following have arrived in the SDFA library:
Beckett, Kenneth, EVERGREENS, 1990
Elliott, Joe, ALPINES THE EASY WAY, 2nd Ed., 1991
Jefferson-Brown, Michael, WILD FLOWER GARDENING, 1990
Knight, E.P., HEATHS & HEATHERS, 3rd Ed., '91
Linnegar, Sidney and Hewitt, Jennifer, IRISES, 1990
Trehane, David, CAMELLIAS, 3rd Ed., 1991

A CUTTING GARDEN FOR CALIFORNIA

by Pat Kite & Betty Mackey

Raise funds, raise flowers!

100 page illustrated PAPERBACK $8.00

Wholesale to Garden Clubs $4.50 Minimum 5 copies

B. B. MACKEY BOOKS
Box 475
Wayne, Dennsylvania 19087
215-971-9409

Waite, Ray, GARDENING IN ORNAMENTAL CONTAINERS, 2nd Ed., 1991
Wall, Bill, AFRICAN VIOLETS AND RELATED PLANTS, 2nd Ed., 1991

Because this series is British, American gardeners will need to make allowances for differences in terminology and to translate climatic conditions. Nevertheless, the information given is more than adequate, and it is clearly presented in an easy-to-use format. There are a few black and white illustrations, and the many color photographs are excellent, and since each book is short the lack of indexes is not a problem. Each title has ancillary information (lists of organizations suggestions for further reading, etc.) and all the writers are acknowledged experts. There is a convenience factor in that a few of these books, collected to suit the individual gardener, would be much easier to handle than a conventional encyclopedia. This is a series which rivals the already well-known paperbacks, e.g., Sunset, Ortho, HP, which are currently available.

Book review by Elsie Topham

* * *

Manthey, Gerda
FUCHSIAS
Timber Press, 1991, 196 pages, black and white; 90 colored photos, 24 illustrations, 8½" x 10½", hardcover, $41.95.

This is a very detailed treatment of the genus. I'm sure fuchsia enthusiasts will find something in here whether they want to learn more about breeding background or just which type of fuchsia they should get to grow in a particular location. A listing of fuchsia societies includes the San Diego branch of the National Fuchsia Society. All fuchsia growers will find the listings of "Cultivars" and "Incorrectly named species" very helpful.

Book review by Harry Tolen

* * *

Feininger, Andreas
TREES
Rizzoli International Publications, 1991, 168 pages, 172 black and white photos, 8 color photos, 8½" x 11", softcover, $29.95.

This is an abridged and revised re-issue of Feininger's successful **TREES**, originally published in hardcover in 1968 by Viking Press. A very timely book now that we are all more aware of the prominent part trees play in our ecology. The black and white photographs are spectacular! The author chose carefully from some 5,000 pictures taken from all over North America, and they are more like art than just pictures of trees.

Book review by Harry Tolen

Jefferson-Brown, Michael
NARCISSUS
Timber Press, 1991, 256 pages, 50 color photos, 20 illustrations, 6" x 9", hardcover, $34.95.

"Daffodils come in an amazing array of form and color these days!" Modern hybridizers are always looking out for something new. This hybridizing progress in narcissus has been producing some fantastic blooms, different from what we are used to seeing. The book covers all aspects of growing these beauties, and the color photographs might get you looking around for some to grow next year.

Book review by Harry Tolen

* * *

Shaw, Barbara
THE BOOK OF PRIMROSES
Timber Press, 1991, 96 pages, 64 full color paintings, 10" x 9", hardcover, $35.00.

This book is devoted entirely to the primrose and polyanthus. The author is keeper of the National Collection of Primroses of Great Britain. She painted all of the magnificent full color botanical illustrations in the book. The reader will find all the necessary information needed to grow some of the primroses with success. You can adjust the cultural information for your own area and the results should be productive. Primroses are easily grown and provide lots of color in spring and early summer. They will grow best in the spring and with some shade (and fairly moist conditions) in summer.

Book review by Harry Tolen

* * *

Hilliard, O. M.
FLOWERS OF THE NATAL DRAKENSBERG
University of Natal Press, 1990, US Distributor, International Specialized Book Services, 84p, 10 color photos, b/w illust., 5 ½" x 8", $14.95, paperback.

The Natal Drakensberg is one of the best protected areas in South Africa. Its wildflowers, from amaryllis to watsonias, orchids to lilies, are at once unusual and familiar. This publication was written as a take-along guide for exploring the area with clear descriptions and botanical illustrations. Interesting as well is the background and native habitat of each of the plants noting members of the species native to South Africa.

Book review by Lucy Warren

* * *

Wheeler, David, Editor
BY PEN & BY SPADE, An Anthology of Garden Writing from Hortus
Summit Books, NY, 1991, 241p, some b&w photos and illust., 6 ½" x 9 ½", $24.95, hard cover.

Occasionally a book comes into the Floral office and is not even catalogued before I zealously snatch it for my own enjoyment and review, for my gardening pleasure is in literature as well as in the rewards of the soil. In 1987, recognizing opportunity to attract just such gardeners, David Wheeler began Hortus, an international quarterly journal for the thinking gardener, from his home in Wales. The rich and varied essays in By Pen & By Spade are edited from the first year's issues. The love of plants and the garden shine through the writings of contemporary plantsmen . . . writers, artists, educators, historians. Some authors are well-known, others soon should be. Each essay stands on its own be it on scented plants, a specific garden, or gardening by and for children. The topics are fascinating and varied. You will not learn how to grow a specific plant, but you will delight in expanded appreciation of the botanical world.

For additional pleasure, Hortus magazine is now available through an American distributor.

Book review by Lucy Warren

PUBLISHERS

International Specialized Book Services, Inc.
5602 N. E. Hassalo Street
Portland, OR 97213-3640

Paul Ecke Ranch Press
Box 488
Encinitas, CA 92024

Rizzoli International Publications, Inc.
300 Park Avenue
New York, NY 10010

Summit Books
1230 Avenue of the Americas
New York, NY 10020

Timber Press, Inc.
9991 S. W. Wilshire
Portland, OR 97225

Van Patten Publishing
Portland, OR

Visley - Cassell Educational Limited
Villiers House 41/47 Strand
London WC2N 5JE

Ward Lock - Sterling Publishing Co., Inc.
387 Park Avenue South
New York, NY 10016

1991 Index

SUBJECT INDEX

ALMANACS
JEANNIE FERNSWORTH
Almanacs Are A
Gardening Tradition
82:6:178

ALSTROEMERIA
WARREN, LUCY
The Work of Leonard
Carrier 82:2:49

BAMBOO
SHOR, BETTY N.
A Bit About Bamboo
82:5:140

BEANS
EPPLE, DAVID L.
Aztec Bean
82:1:15
SMITH, KATHLEEN
A Snap To Grow
82:2:45

BEET
NATIONAL GARDEN BUREAU
The Beet 82:3:74

BOTANY
JONES, BARBARA S.
Barbara's Basic
Botany #5 Leaves
82:1:13
LUCY WARREN
Botanical Red For
The Holidays 82:6:170

BROMELIADS
KENT'S BROMELIAD NURSERY
What Makes Bromeliads No. 1?
82:6:176

BUS TOURS SDFA
GAGLIARDI, HELEN A.
Bus Tour of East
County 82:2:54
Bus Trips 82:3:81
Descanso-April 16
82:2:54
Huntington Gardens
82:5:147
Lake Arrowhead
82:5:147
Living Christmas Color
82:6:173

CACTUS
STAFF
The Holiday Cacti
82:6:167

CALIFORNIA NATIVE PLANTS
HOLSINGER, STEPHANIE CHASE
Landscape Ideas With California
Native Plants, 82:5:132

KASTAMA, PAT
Where To See California
Native Plants 82:5:133
WARREN, LUCY
Where To See California
Native Plants 82:5:133

CALTRANS
STAFF
Caltrans 82:3:69

CARROTS
SHEPHERD'S GARDEN SEEDS
Carrots 82:1:27

CHRISTMAS
THE PLANTS AND COLORS OF
CHRISTMAS
Staff 82:6:164
HOLIDAY CACTI
Staff 82:6:167

COSMOS
WINDISCH, DIANE
The Year Of The
Cosmos 82:2:41

COUNTY FAIRS
STAFF
July County Fairs
82:4:107

CRASSULA
HORWITZ, ROBERT
Crassula 82:3:71

DRAGON TREE
CAROL GREENTREE
Dracaena Draco In
California 82:6:171

DRIP IRRIGATION
HANSEN, ROB
Drip...Drip...Drip
82:1:8

DROUGHT
STAFF
Drought Resistance
82:3:73
CRESS, FORREST
Dealing With A Drought
For California Landscapes
82:5:143

ELEMENTS
NEWTON, BETTY
Essential Elements
82:3:70

ENVIRONMENT
CRESS, FORREST
Environmental Horticulture
Pumps Billions Into
State's Economy 82:2:46

FARMS
STAFF
Enjoy The Best Of
California Farms 82:5:137
CLOSE, CAROL
A Farm In Ramona 82:5:138

FENNEL
SIMON, JAMES E.
Fennel: New Specialty
Vegetable 82:2:44

FIRE
GRAVES, WALTER L.
Early Accounts Reveal
Dramatic Change In
Fire Patterns
82:1:19

FLORAL CLASSES
WALSH, MARIE
Floral Classes
82:6:177

FLORAL LOGO
CALIFORNIA GARDEN STAFF
Floral Updates
Logo 82:1:21

FRUIT TREES
HORWITZ, ROBERT D.
Evergreen Fruit
Trees 82:1:18

FUCHSIA
ROBINSON, GLADYS REED
Fuchsia With Variegated
Leaves 82:5:141

GARDEN GUIDES
STUMBO, JOHN
UC Publishes Guide
To Pesticides On
Small Farm, Garden
82:1:20

GARDENING
JACOBELLI, JOHN
Square Foot
Gardening 82:3:72
STAFF
Gardener's Checklist
82:3:82

GARDENS
CHEW,ERNEST
San-Kei-En
82:2:37
REITER, DAVID
The Balboa Park
Rose Garden 82:1:5
WARREN, LUCY
Balboa Park's First
Japanese Tea Garden
82:2:39

GLASSER, GLORIA
A 'Beastly Garden In
Santa Barbara 82:5:142

GENERAL INTEREST
BRIGADIER, MORT
To Talk Or Not
To Talk 82:3:77
GLASSER, GLORIA
Riddle Of The White-
Lined Sphinx 82:3:83

GERANIUMS
ROLLER, CAROL
Common Geranium
82:3:68

LAVENDER CLOUD
NEWTON, BETTY
New Perennial For
Southern California
82:2:43

LEMONS
STAFF
Do The Lemon
Twist 82:4:116

NATIVE SHRUBS
BARNHART, PETER D.
Native Shrubs For Southern
California Landscape Planting
82:5:135

NITROGEN
NEWTON, BETTY
Getting Nitrogen To
A Plant Takes Time
82:4:100

OAK
MAY, CATHY
Year Of The
Oaks 82;3:82

OCOTILLO
EPPLE, DAVID L.
The Ocotillo 82:2:48

PALMS
GUNTHER, BILL
An Alley Of Palms
82:4:111
Cantu Palms
82:4:108
LORINI, DR.
The Princes Of The
Vegetable Kingdom
82:4:113
TREES OF SAN DIEGO
The Palms - That
Tropical Touch
82:4:103
WARREN, LUCY
A Palette Of
Palms 82:4:101

PEAS
GEMMELL, JOYCE
Edible Pod Peas In
Southern California
82:5:139

PERSONALITIES
STAFF
Mr. Poinsettia
82:6:168

RAIN
GLASSER, GLORIA
Letter From The
Garden 82:1:11

ROSES
WARREN, LUCY
Roses Of The Panama-
California Exposition
82:1:6

SASANQUA
DAVIS, MELBA
Have You Seen The
Sasanqua Blooming
82:1:16
NEWTON, BETTY
Have You Seen The
Sasanqua Blooming
82:1:16

SUCCULENTS
TEDDY COLBERT
The Living Succulent
Wreath 82:6:174

SYSTEMICS
KAPLAN, IRA
Systemics: With Which
You Can Bump Off Bugs
82:1:7

THATCH
AUTIO, RICHARD
COCKERHAM, STEPHEN T.
GILEAULT, VICTOR A.
LEONARD, MATTHEW K.
Thatch Accumulation
In Tall Fescue
Varieties 82:1:17

TOPIARY
AMERICAN IVY SOCIETY
San Diego Topiary
Conference 82:2:47

TRIPS
HELEN A. GAGLIARDI
Bus Trips 82:3:67
Bus Trips 82:2:35
Floral Trip Report
82:4:116
Living Christmas Color
82:6:173

WATER
BEUTEL, JAMES
Saving Water In Home
Gardens 82:3:78

STAFF
Nine Ways To Save Water
82:3:80

WEATHER
JEANNIE FARNSWORTH
Whatever The Weather;
Almanacs Are A Gardening
Tradition 82:6:178

XERISCAPE
JAN TUBIOLO
San Diego Xeriscape Conference

AUTHOR INDEX

AMERICAN IVY SOCIETY
San Diego Topiary
Conference 82:2:47

AUTIO, RICHARD
Thatch Accumulation
In Tall Fescue
Varieties 82:1:17

BARNHART, PETER D.
Native Shrubs for
Planting 82:5:135

BEUTEL, JAMES
Saving Water In Home
Orchards 82:3:78

BRIGADIER, MORT
To Talk Or Not To Talk
82:3:77

CALIFORNIA GARDEN STAFF
Floral Updates Logo
82:1:21
Caltrans 82:3:69
The Holiday Cacti
82:6:167
The Plants and Colors of
Christmas 82:6:164
Mr. Poinsettia 82:6:168

CHEW, ERNEST
San-Kei-En 82:2:37

CLOSE, CAROL
A Farm In Ramona
82:5:138

COCKERHAM, STEPHEN T.
Thatch Accumulation
In Tall Fescue
Varieties 82:1:17

COLBERT, TEDDY
The Living Succulent
Wreath 82:6:174

COREY, KENNETH A.
Keeping Herbs Fresh
82:6:177

CRESS, FORREST
Environmental Horticulture
Pumps Millions Into State's
Economy 82:2:46

DAVIS, MELBA
Have You Seen The
Sasanqua Blooming
82:1:16

EPPLE. DAVID L.
Aztec Bean
The Ocotillo

FERNSWORTH, JEANNIE
Whatever The Weather;
Almanacs Are A Gardening
Tradition 82:6:178

GAGLIARDI, HELEN A.
Bus Tour Of East County
March 15 82:2:54
Bus Trip Report
82:4:116
Bus Trips 82:3:81
Descanso-April 16th
82:2:54
Huntington Gardens
82:5:147
Lake Arrowhead 82:5:147
Living Christmas Color
82:6:173

GEMMELL, JOYCE
Edible Pod Peas
82:5:139

GILEAULT, VICTOR A.
Thatch Accumulation
In Tall Fescue
Varieties 82:1:17

GLASSER, GLORIA
A Beastly Garden
82:5:142
Riddle Of The White-
Lined Sphinx 82:3:83
Letter From The
Garden 82:1:11

GRAVES, WALTER L.
Early Accounts Reveal
Dramatic Change In
Fire Patterns 82:1:19

GREENTREE, CAROL
Dracaena Draco In
California 82:6:171

GUNTHER, BILL
An Alley of
Palms 82:4:111
Cantu Palms
82:4:108
International Palm
Society 82:4:110

HANSEN, ROB
Drip...Drip...Drip
82:1:8

HOLSINGER, STEPHANIE
Landscape Ideas With
Native Plants 82:5:132

HORWITZ, ROBERT D.
Crassula 82:3:71
Evergreen Fruit
Trees 82:1:18

HUNTINGTON LIBRARY STAFF
Orchids: A Victorian
Passion 82:1:23

JACOBELLI, JOHN
Square Foot Gardening
82:3:72

JONES, BARBARA S.
Barbara's Basic
Botany #5 82:1:13

KASTAMA,PATRICIA
Where to See California
Native Plants 82:5:133

KAPLAN, IRA
Systemics 82:1:7

KENT'S BROMELIAD NURSERY
What Makes Bromeliads No. 1?
82:6:176
LEONARD, MATTHEW K.
Thatch Accumulation
In Tall Fescue
Varieties 82:1:17

LORINI,DR.
Princes of the
Vegetable Kingdom
82:4:113

MAY, CATHY
Year Of The Oaks
82:3:82

NATIONAL GARDEN BUREAU
The Beet 82:3:74

NEWTON, BETTY
Essential Elements
82:3:70
Getting Nitrogen
Takes Time
82:4:100
Have You Seen The
Sasanqua Blooming
82:1:16
New Perennial For
Southern California
82:2:43

REITER, DAVID
The Balboa Park
Rose Garden 82:1:5

ROBINSON, GLADYS REED
Fuchsia With Variegated
Leaves 82:5:141

ROLLER, CAROL
Common Geranium 82:3:68

SHEPHERD'S GARDEN SEEDS
Carrots 82:1:27

SHOR, BETTY N.
A Bit About Bamboo
82:5:140

SIMON, JAMES E.
Fennael: New Specialty Vegetable 82:2:44

SMITH, KATHLEEN
A Snap To Grow
82:2:45

STAFF
The Best of California Farms 82:5:137
Drought Resistance
82:3:73
Gardener's Checklist
82:3:80
July County fairs
82:4:107
Lemon Twist
82:4:116
Mr. Poinsettia
82:6:168
Nine Ways To Save
The Palms - That Tropical Touch
82:4:103
The Holiday Cacti
82:6:167
The Plants And Colors Of Christmas 82:6:164
Water 82:3:80

STUMBO, JOHN
UC Publishes Guide To Pesticides On Small Farm, Garden 82:1:20

WALSH, MARIE
Floral Classes
82:6:177

WARREN, LUCY
Balboa Park's First Japanese Tea Garden
82:2:39
Botanical Red For The Holidays 82:6:170
Palette Of Palms
82:4:101
Roses of the Panama-California Exposition
82:1:6
The Work Of Dr. Leonard Carrier
82:2:49
Where to See California Native Plants 82:5:133

WINDISCH, DIANE
The Year Of The Cosmos 82:2:41

BOOK REVIEW INDEX

Books reviewed by Mary Lou Orphey

ADAMS, PETER D.
Bonsai Design Deciduous Coniferous Trees 82:5:148

BAXENDALE, M.
Small Gardens - A Creative Approach to Gardening
82:5:149

BISGROVE, RICHARD
National Trust Book Of The English Garden 82:2:52

BONAR, ANN
Gardening For Fragrance
82:5:149

BROOKLYN BOTANIC GARDEN RECORD
Dyes From Nature
82:2:52

CALIFORNIA GARDEN CLUBS
California Garden Clubs, Inc. Yearbook
82:2:51

CAPRON, BRIAN
Botany For Gardeners
82:1:22

COLEMAN, RONA
PEPPER, SYLVIA
The Encyclopedia of Flower Arranging
82:2:51

COURTIER, J.
Small Gardens - A Creative Approach to Gardening
82:5:149

DENCKLA, TANYA
Gardening At A Glance 82:2:53

EPPLE, DAVID L.
On The Desert
82:2:51*

GAULTE, S. MILLER
SYNGE, PATRICK M.
The Dictionary of Roses In Color 82:2:51

HAGY, FRED
The Practical - Garden of Eden - Beautiful Landscaping With Fruits And Vegetables 82:3:85

HOWELLS, DR. JOHN
A Plantsman's Guide To Clemitas
82:5:148

HYATT, BRENDA
Auriculas 82:1:22

JANE GOTTLIEB
Garden Tales - Classic Stories from Favorite Writers 82:3:85

JONES, PAMELA
How Does Your Garden Grow?
82:5:148

LOVEJOY, ANN, Editor
Perennials 82:5:148

MARTIN, LAURA C.
The Wildflower Meadow Book, A Gardener's Guide 82:2:52

Book review by Edalee Harwell

MORAN, BARBARA, Editor
Special Species, An Anthology Written By And For The Children Of San Diego 82:3:86

PULLEYN, ROB
MAUTOR, CLAUDETTE
Everlasting Floral Gifts 82:1:22

SAMPSON, ISABELLE & REMY
The Creative Art Of Bonsai 82:3:86

SHEEN, JOANNA
The Floral Designer
82:1:23

SMITH, FRED C.
/A Plantsman's Guide to Carnations and Pinks
82:5:148

STEVENS, JOHN
The National Trust Book Of Wild Flower Gardening
82:5:149

SWAIN, ROGER B.
The Practical Gardener
82:5:149

SWENDELLS, PHILLIP
MASON, DAVID
The Complete Book Of The Water Garden 82:3:85

TOOGOOD, ALLEN
Roses In The Garden
82:3:86
Small Gardens - A Creative Approach To Gardening
82:5:149

TOOGOOD, A.
Small Gardens - A Creative Approach To Gardening
82:5:149

TREHANE, DAVID
A Plantsman's Guide To Camellias 82:3:85

WATERS, GEORGE
HARLOW, NORA
The Pacific Horticulture Book of Western Gardening 82:2:52

WILLIAMS, BARRY
HODGSON, IAN
edited by:
Growing Bromeliads
82:3:85

WITHNER, CARL L.
The Cattleyas and Their Relatives
82:2:52

Books reviewed by Elsie Topham

BECK, BEATRICE M.
Drought Tolerant Plants
82:4:117

BRICKELL, CHRISTOPHER, Editor
The American Horticultural Society Encyclopedia of Garden Plants 82:4:117

HARDEN, GWEN,J., Editor
Flora of New South

LINNEGAR, SIDNEY AND HEWITT, JENNIFER
Irises 82:6:183

MELVIN, ROBERT
Profiles In Flowers; The Story of San Diego Floriculture 82:6:182
Wales 82:4:119

STONE, ROBERT
Garden Rooms 82:4:118

SWENDELL, PHILIP
At The Water's Edge; Gardening With Water-Loving Plants 82:6:182

THE ZERCES SOCIETY
Butterfly Gardening
82:4:118

THOMAS, GRAHAM STUART
Perennial Garden Plants
82:4:119

TREHAN, DAVID
Camellias 82:6:183

VON PATTEN, GEORGE F.
Organic Garden Vegetables
82:6:182

WAITE, RAY
Gardening In Ornamental Containers 82:6:183

WALL, BILL
African Violets And Related Plants 82:6:183

Books reviewed by Lucy Warren

ELIOT, GWEN
Australian Plants Identified
82:5:150

ERNST, RUTH SHAW
The Movable Garden
82:5:150

HILLIARD, O. M.
Flowers Of The Natal
Drakensberg 82:6:183

RICHARDSON, NOEL
Summer Herbal Delights
82:5:151

SIGG, ERIC
California Public Gardens:
A Visitor's Guide 82:4:120

WHEELER, DAVID, EDITOR
By Pen And Spade 82:6:184

Books reviewed by Jo Rathmann

BROOKLYN BOTANIC GARDEN RECORD
Pruning Techniques 82:5:150

Books reviewed by Kathy Walsh

JOHNSON, ERIC A
Beautiful Gardens
82:5:151

SCOTT, MILLARD
Beautiful Gardens
82:5:151

Books reviewed by Harry Tolen

FEININGER, ANDREAS
Trees 82:6:183

JEFFERSON-BROWN,MICHAEL
Narcissus 82:6:183

MANTHEY, GERDA
Fuchsias 82:6:183

SHAW, BARBARA
The Book Of Primroses
82:6:183

Books reviewed by
Martha Rosenberg

HARBOUR, ELIZABETH
A Gardener's
Alphabet 82:2:52
Herbs For All Seasons
82:3:86

ILLUSTRATION INDEX

AMERICAN IVY SOCIETY
Animals In The
Garden 82:2:47

BOTANY, HOLT RHINEHART
Plant Display
82:3:70

DOVER BOOKS
Astrophytum
Asterias 82:3:95
Calendula 82:2:62
Chrysanthemum
82:1:31
Daylily 82:1:31
Dragon Tree
82:6:171
Echinocereus
Pentalophus 82:3:73
Epithelantha
Micromeris 82;3:76
Fuchsia 82:5:141
English Holly
82:6:170
Gymnocalycium
Mihanovichi 82:3:95
Fuchsia 82:5:141
Hyacinth 82:2:63
Marigold 82:2:63
Opuntia basilaris
82:3:80
Phlox 82:5:136
Poinsettia 82:6:169
Opuntia bigelovii
Sweet William
82:2:63
Soeki 82:2:40
Sowa 82:2:40
Tree 82:1:18

HANSEN, CELIA A.
A Row of Palms
82:4:97
Tekisui-En Garden
82:2:33
The Holidays
82:6:161

HOYT, ROLAND
Palms 82:4:99
Pelargonium peltatum
82:3:68
Begonia ricinifolia
82:5:158

LINDLEY, MARY JANE
Bush Sunflower
82:5:1
Cleveland Sage
82:5:145
Monkey Flower
82:5:146
Red Buckwheat
82:5:135

HUNTINGTON, MARJI
Achmea fasciata
82:6:176
Neoreglia spectablis
82:6:177
Quesnelia quesneliana
82:6:176

NURSERYLAND
Floral Display
82:3:77

SHEPHERD'S SEEDS
Beets 82:3:74
Fennel 82:2:44
Pod Peas 82:5:139

STAFF
Oak Leaves 82:3:82
Drawing 82:3:77

UNKNOWN
Tree 82:3:94
Palms 82:4:112
Palms 82:4:126

WARREN, LUCY
SDFA Emblem
82:2:3
82:1:21

PHOTO INDEX

AMERICAN IVY SOCIETY
Giraffe Topiary 82:2:47

ECKE POINSETTIA
Paul Ecke, Sr.
82:6:168

GAGLIARDI, JOHN
Balboa Park
Japanese Garden
Gate 82:2:37
Exhibit Building
82:2:37
Serenity 82:2:39

GUNTHER, BILL
An Alley of Palms
82:4:111
Cantu Palms
82:4:108-109

JACOBELLI, JOHN
Square Foot Gardening
Display 82:3:72

NATIONAL GARDEN BUREAU
Cosmos 82:2:41
Seedlings 82:2:41
Beets 82:3:75

NEWTON, BETTY
Camellia Sasanqua
82:1:16
Lavender Cloud
82:2:43
Yuletide 82:1:16

REITER, DAVID
Rose 82:1:6

ROBERT MELVIN PROFILES
Dr. Leonard Carrier
82:2:49

TREES OF SAN DIEGO
PALMS 82:4:103-107

WARREN, LUCY
Alstroemeria 82:2:49
Balboa Park Rose
Garden 82:1:5
Roses 82:1:27
Wittgrove Residence
82:4:101
Native Plants 82:5:133

NOW IS THE TIME INDEX

82:1:24,25,26,27
82:2:55,56,57,58
82:3:87,88,89
82:4:121,122,123
82:5:153,154,155
82:6:179,180,181

BETZLER, JOSEPH
Cacti and Succulents

DONN, BRIAN
Roses

FOUQUETTE, CHARLES
Orchids

FRENCH, GEORGE
Epiphyllums

GRANATOWSKI, FRANK
Epiphyllums

JANZEN, ABE
Dahlias

LAGAMMA,HELEN
African Violets

LEE, MARGARET
Begonias

MAHANAY, CARL
Roses

MARKOWITZ, DR. HERBERT
Bonsai

ROLLER, CAROL
Geranium

SAN DIEGO-IMPERIAL
COUNTY IRIS SOCIETY
Iris

SELBY, WILLIAM
Fuchsias

SIEMERS, MARY
Bromeliads

SNOOKS, E.C.
Camellias

SODOMKA, RAYMOND
Ferns

SAN DIEGO FLORAL ASSOCIATION, INC.

CLUB AND PROFESSIONAL AFFILIATES

ASSOCIATE CLUBS

CITY BEAUTIFUL OF SAN DIEGO
619/488-0830
MIRACOSTA HORTICULTURE CLUB
619/941-4106
QUAIL BOTANICAL GARDENS FOUNDATION, INC
PROFESSIONAL WOMEN'S HORTICULTURAL AND LANDSCAPE ASSN. (PWHLA)
619/723-4316
SAN DIEGO ASSOCIATION OF PROFESSIONAL HORTICULTURISTS
619/530-0358
SAN DIEGO BOTANICAL GARDEN FOUNDATION
619/477-5258
SOUTHWESTERN JUDGES COUNCIL
619/942-8161

GARDEN CLUBS

BERNARDO GARDENER'S CLUB
619/485-1248
BONITA VALLEY GARDEN CLUB
619/475-0987
BRIDGE AND BAY GARDEN CLUB
619/435-8088
CHULA VISTA GARDEN CLUB
619/421-9631
CONVAIR GARDEN CLUB
619/582-7098
CORNONADO FLORAL ASSOCIATION
619/435-3985
CROWN GARDEN CLUB
619/435-9041
DESERT SEA GARDEN CLUB
619/394-9113
DOS VALLES GARDEN CLUB
619/749-6774
ESCONDIDO GARDEN CLUB
619/745-1960
FALLBROOK GARDEN CLUB
619/723-7577
FLEUR DE LEAGUE GARDEN CLUB
619/459-0496
GROSSMONT GARDEN CLUB
619/463-1273
LA JOLLA GARDEN CLUB
619/454-4109
LAKESIDE GARDEN CLUB
619/443-4176
LAS JARDINERAS
LEISURE WORLD GARDEN CLUB
213/596-4161
ORGANIC GARDEN CLUB SAN DIEGO
619/298-9118
PACIFIC BEACH GARDEN CLUB
PALOMAR DISTRICT
CALIFORNIA GARDEN CLUBS, INC.
619/749-3485
POINT LOMA GARDEN CLUB
619/222-2765
RANCHO SANTA FE GARDEN CLUB
SAN CARLOS GARDEN CLUB
619/287-4702
SAN DIEGUITO GARDEN CLUB
619/278-5689
OHARA SCHOOL OF IKEBANA
LA JOLLA CHAPTER
619/456-0559
OHARA SCHOOL OF IKEBANA
SAN DIEGO CHAPTER
619/276-4667
SOGETSU SCHOOL OF IKEBANA
619/429-6198

PLANT SOCIETIES

AFRICAN VIOLETS
BALBOA PARK AFRICAN VIOLET SOCIETY
619/298-7870
HEARTLAND AFRICAN VIOLET SOCIETY
619/469-5579
SAN DIEGO DAYTIME AFRICAN VIOLET SOCIETY
619/422-6841

AROID
INTERNATIONAL AROID SOCIETY
305/271-3767

BAMBOO
AMERICAN BAMBOO SOCIETY
209/539-2145

BEGONIA
ALFRED D. ROBINSON BRANCH
AMERICAN BEGONIA SOCIETY
PALOMAR BRANCH
AMERICAN BEGONIA SOCIETY
619/746-4743
SAN MIGUEL BRANCH
AMERICAN BEGONIA SOCIETY
619/670-0830

BONSAI
SAN DIEGO BONSAI CLUB, INC.
619/421-3721

BROMELIAD
BROMELIAD STUDY GROUP OF BALBOA PARK
619/284-3437
SAN DIEGO BROMELIAD SOCIETY
619/578-7041

CACTUS & SUCCULENT
PALOMAR CACTUS AND SUCCULENT SOCIETY
619/753-3651
SAN DIEGO CACTUS AND SUCCULENT SOCIETY
619/222-3216

CAMELLIA
SAN DIEGO CAMELLIA SOCIETY
619/435-1989

DAHLIAS
AMERICAN DAHLIA SOCIETY INC.
516/742-3898
SAN DIEGO COUNTY DAHLIA SOCIETY
619/279-5135

EPIPHYLLUM
SAN DIEGO EPIPHYLLUM SOCIETY
619/583-9551

EXOTIC
EXOTIC PLANT SOCIETY
619/583-9551

FERN
SAN DIEGO FERN SOCIETY
619/583-9551

FRUIT
CALIFORNIA RARE FRUIT GROWERS
619/453-3321

FUCHSIA & SHADE PLANTS
NATIONAL FUCHSIA SOCIETY
SAN DIEGO COUNTY BRANCH
619/722-3373
SAN DIEGO FUCHSIA AND SHADE PLANT SOCIETY
619/224-5229
SUN HARBOR BRANCH
NATIONAL FUCHSIA SOCIETY
619/469-0900

GERANIUM
SAN DIEGO GERANIUM SOCIETY

WATER LILY
THE WATER LILY SOCIETY
301/874-5373

PROFESSIONAL AFFILIATES

THE GARDEN DOCTOR
3755 Avocado Boulevard
La Mesa CA 91941-7301
619/441-1468

SKYLINE FINANCIAL
Mr. & Mrs. Michael D. Rice
4040 Mars Way
La Mesa CA 91941-7248
619/670-4010

STERLING TOURS
Cheryl Hedgpeth
2707 Congress Street
San Diego CA 92110-2758
619/299-3010

IMPORTANT: All changes and corrections for insertion in the Affiliate listings of *California Garden*, should be sent to the Floral office. Be sure to address the envelope to Nancy Cottingham, Affiliate Editor, San Diego Floral Association, Casa del Prado, Room 105, Balboa Park, San Diego, CA 92101-1619. Call 222-4616. All information should be available at least 6 weeks before publication date.

Thank-you for your cooperation.

Dec. 6 & 7 ***SAN DIEGO FLORAL ASSOCIATION** Annual Holiday Show
Casa del Prado, Majorca Room, Balboa Park. "Christmas Trees": decorated by affiliated garden clubs & plant societies, floral displays, walkabout "living" tree. Fri.: 5-9 p.m.; Sat.: 11-9 p.m. Free. Call 232-5762.

Dec. 7 & 8 **LOS ANGELES STATE & COUNTY ARBORETUM** Annual Holiday Open House
301 North Baldwin Avenue, Arcadia. Visitors permitted in historical Queen Anne Cottage, Coach Barn, Hugo Reid Adobe, & Santa Fe Depot, all holiday decorated. 10-4:30 p.m. Docent tour included in garden admission fee. Call 818/821-3222.

Dec. 7-30 **DESCANSO GARDENS** Annual Christmas Show
1418 Descanso Drive, La Canada Flintridge. Demonstrations of wreath making from herbs, succulents, & evergreens (Dec. 7-16); holiday decorated rooms; outdoor displays; crafts boutique. 10-4 p.m. Garden admission fee. Call 818/952-4401.

Dec. 14 **OHARA SCHOOL OF IKEBANA, LA JOLLA CHAPTER** Bus Trip
Pick-up at University Towne Centre & North County Fair. Visit to Japanese Pavilion at Los Angeles County Museum of Art & shopping in Little Tokyo. 7:30-6 p.m. $15 members, $18 non-members. Reservations & information: 485-0444 or 748-5591.

Dec. 16 ***SAN DIEGO FLORAL ASSOCIATION** Weidner's Gardens Bus Trip
Bus pick-ups in Balboa Park and East County. Dig your own pansies, tour the flower-filled acres, Christmas wreaths workshop/demonstration. $18 members, $21 non-members. Call: 232-5762.

Jan 10, 11, & 12 **CALIFORNIA GARDEN CLUBS, INC., ORANGE COUNTY DISTRICT**
Landscape Design Study Course II, Series XIII. Rose & Crown Pub & Restaurant, 647 Camino de los Mares, San Clemente. Program purpose is to teach good landscape architectural practice. $40 for complete Course II. Call 714/492-5096 to register.

May 15-24 **SAN DIEGO NATURAL HISTORY MUSEUM** Trip to Hawaii
Naturalist-led expedition to islands of Hawaii & Kauai to learn about the ecology, geology, bird & plant life, & cultural heritage. Call Sandy Kuntz, 232-3821, or Carla Munt, 800/252-4910.

Weekends **FRIENDS OF FULLERTON ARBORETUM** Plant Sales
NE Corner of Cal State University, Yorba Linda Blvd. at Associated Road, just west of 57 freeway. Wide variety, some herbs & vegetables. Attractively priced. Sat.: 10-4 p.m.; Sun.: 1-4 p.m. Oct.-Jun., except Dec. 21, 22, 28, 29, & Jan. 4 & 5. Call 714/773-3579.

Weekly **SAN DIEGO JAPANESE FRIENDSHIP GARDEN** Docent Tours
Balboa Park by Organ Pavilion. Tues., Fri., Sat., & Sun.: 10-4 p.m. Donation. Free garden admission Tues. Call 232-2780.

Every Saturday **OFFSHOOT TOURS** One-Hour Plant Walks in Balboa Park
Meet in front of Botanical Lath House. Canceled for rain or less than 4 attendees. 1st Sat.: History Walk; 2nd Sat.: Palm Walk; 3rd Sat.: Tree Walk; 4th Sat.: Desert Walk; 5th Sat.: Sample of all four tours. 10:00 a.m. Free. No reservations.

Deadline for submission to HORTICULTURAL CALENDAR for Jan./Feb. issue is November 15, 1991.
SAN DIEGO FLORAL ASSOCIATION is not responsible for changes in information which has been submitted by the organizations.

This page sponsored by Hazard Mart

San Diego's largest and most fully stocked Masonry and Landscape Centers with two locations to serve you.

Miramar
5590 Eastgate Mall Road
619/587-3636

El Cajon
1155 Vernon Way
619/448-7411

SAN DIEGO FLORAL ASSOCIATION, INC.
Garden Center & Library
Casa del Prado Room 105 San Diego CA 92101-1619
619/232-5762

Under the sponsorship of the Park & Recreation Department, City of San Diego, California

OFFICERS

President
Patricia T. Kastama
619/222-2707
1st Vice President
Barbara Pruyne
2nd Vice President
Lucy Warren
Treasurer
John Lewis
Recording Secretary
Jean E. Johns
Corresponding Secretary
Mrs. William Rathmann
Past President
Don Boyer
Office/Financial Secretary
Tillie Marcus
Ann Waters

DIRECTORS

Term 1989-1992
Lynn Beyerle
Milton Sessions
Lois Vaiana
Term 1990-1993
Frances Clare
Marie Walsh
Vernice Putman
Term 1991-1994
Louise Lewis
Kathy Walsh
Mary Jordan

COMMITTEES

Computer Operator
Lynn Beyerle
Editor, California Garden
John J. Gagliardi
619/449-1648
Flower Arrangers Guild
Elma Garcia
619/672-9838
Historian
Barbara Jones
619/222-1032
Public Relations
Mary Jordan
619/222-7665
Hospitality
Kathy Walsh
619/296-8429
Hosts & Hostesses
Vernice Putman
619/749-9587
Tours
Helen A. Gagliardi
Ann Waters
619/449-1648
Newsletter
Lucy Warren
619/295-2489

HONORARY LIFE MEMBERS

Allethe Macdonald
Polly Whigman
Elizabeth B. Glover
Barbara S. Jones
Roy Jones
Elsie Topham
Don Boyer
Nancy Cottingham

Computerization of Page Layouts by:

R. Barry Lewis
Computer System Analyst
619/460-2136

A Good Holiday Gift?
A years subscription to
California Garden Magazine - $7
or a Membership in San Diego
Floral Association - $10 per year
Includes Subscription to the Magazine

IN AND ABOUT THIS ISSUE

ALL OF OUR READERS are invited to visit the Floral display in Balboa Park at Casa del Prado December 6 & 7.

Our theme this issue is "RED" for joy, and we see it everywhere. We hope you will enjoy reading about so many holiday plants.

If you enjoy crafts, join us at Floral workshops to make your own topiary, flower arrangements, or basket. Or join us for a local bus trip and receive special attention at Weidner's Nursery on December 16th.

A new artist, Marji Huntington, has offered her talents in illustrating several examples of bromeliads. We hope to see more of her work in the future.

Next issue you can look forward to articles on bare root plants and planting. Meanwhile, enjoy your holidays!

Mission Hills Nursery. Your Garden Center for Every Season

Mission Hills Nursery has been serving San Diego's gardeners for over 80 years. We pride ourselves in the wide selection and quality of our merchandise and in the knowledge and experience of our staff. We invite you to stop by at any time and get acquainted.

Christmas is in the Air

It won't be long before the smell of fresh cut Christmas trees fills the air around Mission Hills Nursery. Once again, we will be carrying fresh cut and live Christmas trees as well as a full assortment of wreaths, garlands and poinsettias in every size and color! Let us help you decorate your holdiays.

Bare Root Season is Here

In addition to our Christmas inventory, Mission Hills now has a complete selection of bare root roses and fruit trees ready for your winter garden.

Stop by and pick up your favorites. And remember, our staff is always there to answer any of your questions.

MISSION HILLS NURSERY

1525 Ft. Stockton St. • San Diego, CA 92103 • **(619) 295-2808**

CALIFORNIA GARDEN (USPS 084-240)
San Diego Floral Association, Inc.
Casa del Prado, Balboa Park
San Diego, CA 92101-1619, USA

SECOND CLASS POSTAGE PAID AT SAN DIEGO, CALIFORNIA